

axiomTM



The 30 Year Horizon

| | | |
|------------------------------|------------------------|---------------------------|
| <i>Manuel Bronstein</i> | <i>William Burge</i> | <i>Timothy Daly</i> |
| <i>James Davenport</i> | <i>Michael Dewar</i> | <i>Martin Dunstan</i> |
| <i>Albrecht Fortenbacher</i> | <i>Patrizia Gianni</i> | <i>Johannes Grabmeier</i> |
| <i>Jocelyn Guidry</i> | <i>Richard Jenks</i> | <i>Larry Lambe</i> |
| <i>Michael Monagan</i> | <i>Scott Morrison</i> | <i>William Sit</i> |
| <i>Jonathan Steinbach</i> | <i>Robert Sutor</i> | <i>Barry Trager</i> |
| <i>Stephen Watt</i> | <i>Jim Wen</i> | <i>Clifton Williamson</i> |

Volume 10: Axiom Algebra: Implementation

February 1, 2019

36326d620b73709fd7ca49dad2be97c3cd43487

Portions Copyright (c) 2005 Timothy Daly

The Blue Bayou image Copyright (c) 2004 Jocelyn Guidry

Portions Copyright (c) 2004 Martin Dunstan

Portions Copyright (c) 2007 Alfredo Portes

Portions Copyright (c) 2007 Arthur Ralfs

Portions Copyright (c) 2005 Timothy Daly

Portions Copyright (c) 1991-2002,

The Numerical ALgorithms Group Ltd.

All rights reserved.

This book and the Axiom software is licensed as follows:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are

met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of The Numerical ALgorithms Group Ltd. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Inclusion of names in the list of credits is based on historical information and is as accurate as possible. Inclusion of names does not in any way imply an endorsement but represents historical influence on Axiom development.

| | | |
|------------------------|-----------------------|-----------------------|
| Michael Albaugh | Cyril Alberga | Roy Adler |
| Christian Aistleitner | Richard Anderson | George Andrews |
| Jerry Archibald | S.J. Atkins | Jeremy Avigad |
| Henry Baker | Martin Baker | Stephen Balzac |
| Yurij Baransky | David R. Barton | Thomas Baruchel |
| Gerald Baumgartner | Gilbert Baumslag | Michael Becker |
| Nelson H. F. Beebe | Jay Belanger | David Bindel |
| Fred Blair | Vladimir Bondarenko | Mark Botch |
| Raoul Bourquin | Alexandre Bouyer | Karen Braman |
| Wolfgang Brehm | Peter A. Broadbery | Martin Brock |
| Manuel Bronstein | Christopher Brown | Stephen Buchwald |
| Florian Bundschuh | Luanne Burns | William Burge |
| Ralph Byers | Quentin Carpent | Pierre Casteran |
| Robert Cavines | Pablo Cayuela | Bruce Char |
| Ondrej Certik | Tzu-Yi Chen | Bobby Cheng |
| Cheekai Chin | David V. Chudnovsky | Gregory V. Chudnovsky |
| Mark Clements | Roland Coeurjoly | James Cloos |
| Jia Zhao Cong | Josh Cohen | Christophe Conil |
| Don Coppersmith | George Corliss | Robert Corless |
| Gary Cornell | Meino Cramer | Karl Crary |
| Jeremy Du Croz | David Cyganski | Nathaniel Daly |
| Timothy Daly Sr. | Timothy Daly Jr. | James H. Davenport |
| David Day | James Demmel | Didier Deshommes |
| Michael Dewar | Inderjit Dhillon | Jack Dongarra |
| Jean Della Dora | Gabriel Dos Reis | Claire DiCrescendo |
| Sam Dooley | Nicolas James Doye | Zlatko Drmac |
| Lionel Ducos | Iain Duff | Lee Duhem |
| Martin Dunstan | Brian Dupee | Dominique Duval |
| Robert Edwards | Hans-Dieter Ehrich | Heow Eide-Goodman |
| Lars Erickson | Mark Fahey | Richard Fateman |
| Bertfried Fauser | Stuart Feldman | John Fletcher |
| Brian Ford | Albrecht Fortenbacher | George Frances |
| Constantine Frangos | Timothy Freeman | Korriinn Fu |
| Marc Gaetano | Rudiger Gebauer | Van de Geijn |
| Kathy Gerber | Patricia Gianni | Gustavo Goertkin |
| Samantha Goldrich | Holger Gollan | Teresa Gomez-Diaz |
| Laureano Gonzalez-Vega | Stephen Gortler | Johannes Grabmeier |
| Matt Grayson | Klaus Ebbe Grue | James Griesmer |
| Vladimir Grinberg | Oswald Gschnitzer | Ming Gu |
| Jocelyn Guidry | Gaetan Hache | Steve Hague |
| Satoshi Hamaguchi | Sven Hammarling | Mike Hansen |
| Richard Hanson | Richard Harke | Bill Hart |
| Vilya Harvey | Martin Hassner | Arthur S. Hathaway |
| Dan Hatton | Waldek Hebisch | Karl Hegbloom |
| Ralf Hemmecke | Henderson | Antoine Hersen |
| Nicholas J. Higham | Hoon Hong | Roger House |
| Gernot Hueber | Pietro Iglio | Alejandro Jakubi |
| Richard Jenks | Bo Kagstrom | William Kahan |
| Kyriakos Kalorkoti | Kai Kaminski | Grant Keady |
| Wilfrid Kendall | Tony Kennedy | David Kincaid |
| Keshav Kini | Ted Kosan | Paul Kosinski |

| | | |
|----------------------|------------------------|-----------------------|
| Igor Kozachenko | Fred Krogh | Klaus Kusche |
| Bernhard Kutzler | Tim Lahey | Larry Lambe |
| Kaj Laurson | Charles Lawson | George L. Legendre |
| Franz Lehner | Frederic Lehubey | Michel Levaud |
| Howard Levy | J. Lewis | Ren-Cang Li |
| Rudiger Loos | Craig Lucas | Michael Lucks |
| Richard Luczak | Camm Maguire | Francois Maltey |
| William Martin | Osni Marques | Alasdair McAndrew |
| Bob McElrath | Michael McGettrick | Edi Meier |
| Ian Meikle | David Mentre | Jonathan Millen |
| Victor S. Miller | Gerard Milmeister | Mohammed Mobarak |
| H. Michael Moeller | Michael Monagan | Marc Moreno-Maza |
| Scott Morrison | Joel Moses | Mark Murray |
| William Naylor | Patrice Naudin | C. Andrew Neff |
| John Nelder | Godfrey Nolan | Arthur Norman |
| Jinzhong Niu | Michael O'Connor | Summat Oemrawsingh |
| Kostas Oikonomou | Humberto Ortiz-Zuazaga | Julian A. Padget |
| Bill Page | David Parnas | Susan Pelzel |
| Michel Petitot | Didier Pinchon | Ayal Pinkus |
| Frederick H. Pitts | Frank Pfenning | Jose Alfredo Portes |
| E. Quintana-Orti | Gregorio Quintana-Orti | Beresford Parlett |
| A. Petitot | Andre Platzer | Peter Poromaas |
| Claude Quitte | Arthur C. Ralfs | Norman Ramsey |
| Anatoly Raportirenko | Guilherme Reis | Huan Ren |
| Albert D. Rich | Michael Richardson | Jason Riedy |
| Renaud Rioboo | Jean Rivlin | Nicolas Robidoux |
| Simon Robinson | Raymond Rogers | Michael Rothstein |
| Martin Rubey | Jeff Rutter | Philip Santas |
| David Saunders | Alfred Scheerhorn | William Schelter |
| Gerhard Schneider | Martin Schoenert | Marshall Schor |
| Frithjof Schulze | Fritz Schwarz | Steven Segletes |
| V. Sima | Nick Simicich | William Sit |
| Elena Smirnova | Jacob Nyffeler Smith | Matthieu Sozeau |
| Ken Stanley | Jonathan Steinbach | Fabio Stumbo |
| Christine Sundaresan | Klaus Sutner | Robert Sutor |
| Moss E. Sweedler | Eugene Surowitz | Yong Kiam Tan |
| Max Tegmark | T. Doug Telford | James Thatcher |
| Laurent Thery | Balbir Thomas | Mike Thomas |
| Dylan Thurston | Francoise Tisseur | Steve Toleque |
| Raymond Toy | Barry Trager | Themos T. Tsikas |
| Gregory Vanuxem | Kresimir Veselic | Christof Voemel |
| Bernhard Wall | Stephen Watt | Andreas Weber |
| Jaap Weel | Juergen Weiss | M. Weller |
| Mark Wegman | James Wen | Thorsten Werther |
| Michael Wester | R. Clint Whaley | James T. Wheeler |
| John M. Wiley | Berhard Will | Clifton J. Williamson |
| Stephen Wilson | Shmuel Winograd | Robert Wisbauer |
| Sandra Wityak | Waldemar Wiwianka | Knut Wolf |
| Yanyang Xiao | Liu Xiaojun | Clifford Yapp |
| David Yun | Qian Yun | Vadim Zhytnikov |
| Richard Zippel | Evelyn Zoernack | Bruno Zuercher |
| Dan Zwillinger | | |

Contents

| | | |
|----------|---|----------|
| 1 | The Algebra Makefile | 1 |
| 1.1 | Adding new algebra | 1 |
| 1.2 | Adding the algebra to the proper book | 2 |
| 1.2.1 | Adding a Category | 2 |
| 1.2.2 | Adding a Domain | 2 |
| 1.2.3 | Adding a Package | 8 |
| 1.2.4 | Adding Numerics | 8 |
| 1.3 | Rebuilding the algebra from scratch | 8 |
| 1.4 | The Algebra Lattice Layers | 9 |
| 1.4.1 | Layer 0 Bootstrap | 9 |
| 1.4.2 | Layer 0 | 11 |
| 1.4.3 | Layer 1 | 15 |
| 1.4.4 | Layer 2 | 24 |
| 1.4.5 | Layer 3 | 33 |
| 1.4.6 | Layer 4 | 37 |
| 1.4.7 | Layer 5 | 39 |
| 1.4.8 | Layer6 | 43 |
| 1.4.9 | Layer7 | 52 |
| 1.4.10 | Layer8 | 79 |
| 1.4.11 | Layer9 | 94 |
| 1.4.12 | Layer10 | 100 |
| 1.4.13 | Layer11 | 112 |
| 1.4.14 | Layer12 | 181 |
| 1.4.15 | Layer13 | 189 |
| 1.4.16 | Layer14 | 194 |

| | | |
|----------|--|------------|
| 1.4.17 | Layer15 | 203 |
| 1.4.18 | Layer16 | 207 |
| 1.4.19 | Layer17 | 245 |
| 1.4.20 | Layer18 | 297 |
| 1.4.21 | Layer19 | 313 |
| 1.4.22 | Layer20 | 318 |
| 1.4.23 | Layer21 | 319 |
| 1.4.24 | Layer22 | 321 |
| 1.4.25 | Layer23 | 322 |
| 1.4.26 | Order | 323 |
| 1.5 | Cliques | 324 |
| 1.6 | Broken Files | 325 |
| 1.7 | The Environment | 325 |
| 1.7.1 | The working directories | 325 |
| 1.7.2 | The depsys variable | 326 |
| 1.7.3 | The intersys variable | 326 |
| 1.7.4 | The shell variable | 326 |
| 1.8 | The Makefile Stanzas | 327 |
| 1.9 | Generic Make Rules | 328 |
| 1.10 | Pamphlet file structure | 330 |
| 1.10.1 | Finding the algebra code | 331 |
| 1.10.2 | Write the Makefile stanzas for the algebra files | 331 |
| 1.10.3 | Find the algebra bootstrap code | 333 |
| 1.10.4 | Write the Makefile stanzas for the bootstrap files | 333 |
| 1.11 | Stage markers | 334 |
| 1.11.1 | Regression testing | 336 |
| 1.12 | The Makefile | 359 |
| 2 | Algebra Background | 363 |
| 2.1 | How NAG Libraries were used | 365 |
| 2.2 | Algebraic Function Fields and Algebraic Geometry | 365 |
| 2.2.1 | The Genus of a Plane Curve | 366 |
| 2.2.2 | Algebraic Curves with PAFF | 372 |
| 2.2.3 | Algebraic Curves with PAFFFF | 376 |

| | | |
|-------|--|------------|
| 2.3 | Groebner Basis | 384 |
| 2.3.1 | How To Compute A Groebner Basis | 384 |
| 2.3.2 | Monomial Ordering | 386 |
| 2.3.3 | Variable Ordering | 387 |
| 2.3.4 | Combined Ordering | 387 |
| 2.3.5 | An Example Computation | 387 |
| 2.4 | Elementary Functions | 390 |
| 2.4.1 | Rationale for Branch Cuts and Identities | 390 |
| 2.4.2 | Inverse trigonometric functions | 392 |
| 2.4.3 | Inverse hyperbolic functions | 393 |
| | Bibliography | 395 |

New Foreword

On October 1, 2001 Axiom was withdrawn from the market and ended life as a commercial product. On September 3, 2002 Axiom was released under the Modified BSD license, including this document. On August 27, 2003 Axiom was released as free and open source software available for download from the Free Software Foundation's website, Savannah.

Work on Axiom has had the generous support of the Center for Algorithms and Interactive Scientific Computation (CAISS) at City College of New York. Special thanks go to Dr. Gilbert Baumslag for his support of the long term goal.

The online version of this documentation is roughly 1000 pages. In order to make printed versions we've broken it up into three volumes. The first volume is tutorial in nature. The second volume is for programmers. The third volume is reference material. We've also added a fourth volume for developers. All of these changes represent an experiment in print-on-demand delivery of documentation. Time will tell whether the experiment succeeded.

Axiom has been in existence for over thirty years. It is estimated to contain about three hundred man-years of research and has, as of September 3, 2003, 143 people listed in the credits. All of these people have contributed directly or indirectly to making Axiom available. Axiom is being passed to the next generation. I'm looking forward to future milestones.

With that in mind I've introduced the theme of the "30 year horizon". We must invent the tools that support the Computational Mathematician working 30 years from now. How will research be done when every bit of mathematical knowledge is online and instantly available? What happens when we scale Axiom by a factor of 100, giving us 1.1 million domains? How can we integrate theory with code? How will we integrate theorems and proofs of the mathematics with space-time complexity proofs and running code? What visualization tools are needed? How do we support the conceptual structures and semantics of mathematics in effective ways? How do we support results from the sciences? How do we teach the next generation to be effective Computational Mathematicians?

The "30 year horizon" is much nearer than it appears.

Tim Daly
CAISS, City College of New York
November 10, 2003 ((iHy))

Chapter 1

The Algebra Makefile

1.1 Adding new algebra

This is a complex process by its very nature. Developers and Maintainers who undertake the process need to understand quite a lot of detail. The ultimate steps to add algebra are tedious but simple. Note that only algebra code that gets shipped with the system needs to undergo this process. User code can be compiled once the distributed algebra exists and does not need either this Makefile or this installation process.

Since understanding is the key to making correct changes to this file I'll work on explaining the details of why things need to exist.

The first idea that you need to understand is the overall process of adding algebra code. Lets assume that you have a brand new spad file, called `bsd.spad` containing a simple domain BSD. The steps in the process of adding this file are:

1. Find out where the algebra code lives in the lattice.
 - (a) Start a new intersys session. This will give you a clean build.
 - (b) `)set mes auto on` – This will allow us to see what algebra files get loaded during compile
 - (c) `)co BAR.spad`
 - (d) We collect all the names of the algebra files BSD loaded. Look for lines that say a file is loaded. Collect all of the names of those files.
 - (e) For each of the loaded files determine which layer contains the loaded file by searching this file. For instance, if `BAR.spad` required `FSAGG` then look for `/FSAGG.o`, which resides in layer 13.
 - (f) Determine the highest layer (e.g. 13) that contains the required files and add the new algebra file (e.g. `BSD.o`) in the next layer (e.g. 14).
 - (g) Next we need to create the graph structure information. This involves creating a two part stanza of information. For instance,

```
"BSD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BSD",
      shape=ellipse]
/*"BSD" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"; "INT"}*/
```

```
/*"BSD" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"BSD" -> {"IEVALAB"; "CLAGG"; "SETAGG"; "FINITE"; "OM"; "PATMAB"}*/
"BSD" -> "FSAGG"
```

- (h) The first part determines the color, shape of the graph node, and a link to the book containing the source code. The color and name of the book are related:
 - i. #4488FF == bookvol10.2
 - ii. #88FF44 == bookvol10.3
 - iii. #FF4488 == bookvol10.4
 - iv. #444488 == bookvol10.5
 - (i) The second part is the graph structure. All of the loaded algebra files are listed (currently as comments due to the size of the complete graph). In particular, the node that “supports” BSD is FSAGG so we make sure that the graph edge “BSD” -> “FSAGG” is uncommented.
2. Insert the documentation after the layer (e.g after layer 14). This documentation is used to reconstruct the full and partial graphs.
 3. Insert the `$(OUT)/BSD.o` file into the layer’s file list. This will cause the algebra to build after all of the algebra it depends on is built.
 4. Add the algebra to the books

1.2 Adding the algebra to the proper book

The algebra sources are in 4 books:

- bookvol10.2 == Category
- bookvol10.3 == Domain
- bookvol10.4 == Package
- bookvol10.5 == Numeric

The algebra in these files is structured slightly differently for each one. Follow the directions for the kind of algebra you are adding.

1.2.1 Adding a Category

1.2.2 Adding a Domain

In the Domains book we see that each domain is in alphabetic order by the **full domain name**, not by the abbreviation. So for BSD we see several parts.

The section separator

This gives a visual and logical separation for each domain.

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\section{domain BSD BasicStochasticDifferential}
```

The input section

This is a standard input file format. It will be extracted from the book during the testing process so we can keep the test cases with the domain. The `--R` lines are the commented output of actually running the functions. Note that `--` is the comment character in Axiom. The “regress” function will run the code and then compare the actual output with the lines marked `--R` and report any differences.

You can create this file by:

- Start Axiom
- make a `bsd.input` file with all of your algebra tests
- `)co BSD` – compile your algebra to make sure it is up to date
- `)spool BSD.output` – this will put all output into a file
- `)read bsd` – this will read the tests and the output will be stored in `BSD.output`
- Modify the `BSD.output` file to have the same format using `--S n of N` to start the test, `--R` to prefix the actual output, and `--E n` to end the test.
- save the test as `bsdtest.input`
- Validate the newly formatted test file (`bsdtest.input`):
 - start a new Axiom
 - `)co BSD` – compile your new algebra
 - `)read bsdtest.input` – BE SURE to use the new test file format. If you did it right it will create a new file called `BasicStochasticDifferential.output`
 - `)lisp (regress "BasicStochasticDifferential.output")` – this will run the regress function which compares the actual output with the expected output and reports success or failure.
 - fix up failures and repeat until none remain
 - add the contents of `bsdtest.input` to the algebra file

The input section

Here we use `BasicStochasticDifferential.output` to create a set of test cases. These are automatically extracted as part of the build process by the function “`makeInputFiles`”. This function is in the `tangle.lisp` file.

```
)set break resume
)sys rm -f BasicStochasticDifferential.output
)spool BasicStochasticDifferential.output
)set message test on
)set message auto off
)clear all
--S 1 of 2
q := D(p, x)
--R
--R
--R
--R (6)  0.1x + 0.10
```

```

--R                                                    Type: Polynomial BinaryExpansion
--E 1

--S 2 of 2
g := gcd(p, q)
--R
--R
--R
--R (7)  x + 1.01
--R
--R                                                    Type: Polynomial BinaryExpansion
--E 2

)spool
)lisp (bye)

```

The help section

This section becomes a help file in the distributed Axiom system. This section is automatically extracted as part of the build process by the function “makeHelpFiles”. This function is in the tangle.lisp file. The help section gets typed out when the user types:

```

)help BasicStochasticDifferential

begin{chunk}{BasicStochasticDifferential.help}
=====
BasicStochasticDifferential examples
=====
All rational numbers have repeating binary expansions. Operations to
access the individual bits of a binary expansion can be obtained by
converting the value to RadixExpansion(2). More examples of
expansions are available with

The expansion (of type BinaryExpansion) of a rational number is
returned by the binary operation.

r := binary(22/7)
---
11.001
Type: BinaryExpansion

Arithmetic is exact.

r + binary(6/7)
100
Type: BinaryExpansion

See Also:
o )help BasicStochasticDifferential
o )help HexadecimalExpansion
o )show BasicStochasticDifferential

end{chunk}

```

The pagehead section

Next we create the format information for the book itself. This will control the display of the new algebra in the book. The “pagehead” macro formats a new section for this algebra and adds it to the proper indexing and other housekeeping sections.

The “pagepic” creates a graph image inline showing the subgraph containing this algebra from the full graph. This information is kept in this file (see the graph subsection below). The “1.00” is a scaling factor for the graph.

The “pageto” macro inserts HTML anchors into the PDF file so there is a way to navigate to algebra that is “above” this domain in the graph. There can be multiple pageto macros.

The “pagefrom” macro inserts HTML anchors into the PDF file so there is a way to navigate to algebra that is “below” this domain in the graph. There can be multiple pagefrom macros.

Together these two macros, pageto and pagefrom, allow the user to follow the thread of domains in the PDF documentation.

```
\pagehead{BasicStochasticDifferential}{BSD}
\pagepic{ps/v103basicstochasticdifferential.ps}{BSD}{1.00}
{\bf See}\\
\pageto{HexadecimalExpansion}{HEXADEC}
```

The Exports section

This shows the same information as the “)show” function in a running Axiom. The “cross” macro adds information to the index to cross reference the domain and the functions.

```
{\bf Exports:}\\
\begin{tabular}{l}
\cross{BSD}{0} & & \\
\cross{BSD}{1} & & \\
\cross{BSD}{abs} & & \\
\cross{BSD}{associates?} & & \\
\cross{BSD}{binary} & & \\
\cross{BSD}{ceiling} & & \\
\cross{BSD}{characteristic} & & \\
\end{tabular}
```

The Code section

This is the actual algebra. Note that the “++” comments from the description section are available at runtime using the “)describe” command. They have certain format limitations so be sure to check this in the final system.

The signatures have comments. If the comments are broken into two parts and the lines of the second part of the comment start with “++X” then these will be typed out as part of the output of the command “)d op”. For instance, in the code below for the “introduce!” function the comments read:

```
introduce!: (Symbol,Symbol) -> Union(%, "failed")
++ introduce!(X,dX) returns \axiom{dX} as \axiom{BSD} if it
++ isn't already in \axiom{BSD}
++
++X introduce!(t,dt)
```

When we type “d op introduce!” in a running Axiom we will see the example text:

```

introduce!(t,dt)

<domain BSD BasicStochasticDifferential>>=
)abbrev domain BSD BasicStochasticDifferential
++ Basic Operations: introduce!, copyBSD, copyIto, getSmgl
++ Related Domains: StochasticDifferential(R)
++ Also See:
++ AMS Classifications:
++ Keywords: stochastic differential, semimartingale.
++ Examples:
++ References:
++ Ito (1975), Kendall (1991a,b; 1993a,b; 1999a,b).
++ Description:
++ Based on Symbol: a domain of symbols
++ representing basic stochastic differentials, used
++ in StochasticDifferential(R) in the underlying
++ sparse multivariate polynomial representation.
++
++ We create new BSD only by coercion from Symbol
++ using a special function introduce! first of all to
++ add to a private set SDset. We allow a separate
++ function convertIfCan which will check whether the
++ argument has previously been declared as a BSD.
BasicStochasticDifferential(): Category == Implementation where
INT ==> Integer
OF ==> OutputForm
Category ==> OrderedSet with
ConvertibleTo(Symbol)

convertIfCan: Symbol -> Union(%, "failed")
++ convertIfCan(ds) transforms \axiom{dX} into a \axiom{BSD}
++ if possible (if \axiom{introduce(X,dX)} has
++ been invoked previously).

convert: Symbol -> %
++ convert(dX) transforms \axiom{dX} into a \axiom{BSD}
++ if possible and otherwise produces an error.

introduce!: (Symbol,Symbol) -> Union(%, "failed")
++ introduce!(X,dX) returns \axiom{dX} as \axiom{BSD} if it
++ isn't already in \axiom{BSD}

d: Symbol -> Union(%,INT)
++ d(X) returns \axiom{dX} if \axiom{tableIto(X)=dX}
++ and otherwise returns \axiom{0}

copyBSD(): -> List %
++ copyBSD() returns \axiom{setBSD} as a list of \axiom{BSD}.
copyIto(): -> Table(Symbol,%)
++ copyIto() returns the table relating semimartingales
++ to basic stochastic differentials.
getSmgl: % -> Union(Symbol,"failed")
++ getSmgl(bsd) returns the semimartingale \axiom{S} related

```

```

++ to the basic stochastic differential \axiom{bsd} by
++ \axiom{introduce!}

Implementation ==> Symbol add

Rep := Symbol

setBSD := empty()$Set(Symbol)
tableIto:Table(Symbol,%) := table()
tableBSD:Table(%,Symbol) := table()

convertIfCan(ds:Symbol):Union(%, "failed") ==
  not(member?(ds, setBSD)) => "failed"
  ds::%

convert(ds:Symbol):% ==
  (du:=convertIfCan(ds))
  case "failed" =>
    print(hconcat(ds::Symbol::OF,
      message(" is not a stochastic differential")$OF))
    error "above causes failure in convert$BSD"
  du

introduce!(X,dX) ==
  member?(dX, setBSD) => "failed"
  insert!(dX, setBSD)
  tableBSD(dX::%) := X
  tableIto(X) := dX::%

d(X) ==
  search(X, tableIto) case "failed" => 0::INT
  tableIto(X)

copyBSD() == [ds::% for ds in members(setBSD)]
copyIto() == tableIto
getSmgl(ds:%) :Union(Symbol, "failed") == tableBSD(ds)

```

The dotabb section

This section is used to create the “ps/v103basicstochasticdifferential.ps” graph image used above. The actual code used is kept here so we can modify or reproduce the result. The first line is the current domain. The second line is the domain, category, or package that “supports” this domain in the previous layer. These three lines are create the subgraph of the main algebra graph.

```

<BINARY.dotabb>>=
"BSD" [color="#88FF44", href="bookvol10.3.pdf#nameddest=BSD",
      shape=ellipse]
"FSAGG" [color="#4488FF", href="bookvol10.2.pdf#nameddest=FSAGG"]
"BSD" -> "FSAGG"

\end{chunk}

```


In order to actually create the graph this code gets wrapped with the graphviz information. So you pick up the above lines and insert them into a file surrounded by the graphviz commands as in:

```
digraph pic {
  fontsize=10;
  bgcolor="#ECEA81";
  node [shape=box, color=white, style=filled];

  "BSD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BSD",
        shape=ellipse]
  "FSAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FSAGG"]
  "BSD" -> "FSAGG"
}
```

Save this in a file, say `bsd.dot`. To create the correct postscript file use the command:

```
dot -Teps bsd.dot >ps/v103basicstochasticdifferential.eps
```

Notice that the output goes into a `ps` subdirectory. It is named with the `v103` prefix, meaning it is intended for volume 10.3.

The `REGRESS` table contains the names of all of the regression files. These are the test case files we constructed for the algebra. Putting a chunk name in this table will extract the test case, run it, and run regression testing on it looking for failures. The naming convention is the same as the `.input` file but uses `.regress` so the Makefile regression stanza is invoked. So, for our example, we need to add

```
BasicStochasticDifferential.regress
```

We must also add the domain to the `$globalExposureGroupAlist` in the interpreter (book volume 5). This is a lisp cons structure where the CAR is the domain name and the CDR is the domain abbreviation. So we add the line:

```
(|BasicStochasticDifferential| . BSD)
```

1.2.3 Adding a Package

1.2.4 Adding Numerics

1.3 Rebuilding the algebra from scratch

Compile order is important. Here we try to define the ordered lattice of `spad` file dependencies. However this is, in reality, a graph rather than a lattice. In order to break cycles in this graph we explicitly cache a few of the intermediate generated lisp code for certain files. These are marked throughout (both here and in the various pamphlet files) with the word **BOOTSTRAP**.

If we take a cycle such as **RING** we discover that in order to compile the `spad` code we must load the compiled definition of **RING**. In this case we must compile the cached lisp code before we try to compile the `spad` file.

The cycle for **SETCAT** is longer consisting of: **SETCAT** needs **SINT** needs **UFD** needs **GCDDOM** needs **COMRING** needs **RING** needs **RNG** needs **ABELGRP** needs **CABMON** needs **ABELMON** needs **ABELSG** needs **SETCAT**.

It is highly recommended that you try to become a developer of Axiom and read the archived mailing lists before you decide to change a cached file. In the fullness of time we will rewrite the whole algebra structure into a proper lattice if possible. Alternatively we'll reimplement the compiler to handle graphs. Or deeply adopt the extensible domains. Whatever we do will be much discussed (and cause much disgust) around the campfire. If you come up with a brilliant plan that gets adopted we'll even inscribe your name on a log and add it to the fire.

In the code that follows we find the categories, packages and domains that compile with no dependencies and call this set "layer 0". Next we find the categories, packages and domains that will compile using only "layer 0" code and call this "layer 1". We walk up the lattice in this fashion adding layers. Note that at layer 3 this process runs into cycles and we create the "layer 3 bootstrap" stanzas before continuing upward.

1.4 The Algebra Lattice Layers

1.4.1 Layer 0 Bootstrap

The easiest way to find out where a spad file lives in the hierarchy is to create the following script (called 'show'):

```
echo ")co $1" | AXIOMsys >out
fgrep abbreviates out
fgrep "Loading" out | grep -v autoload
```

and then run it with `./show FOO` where the algebra source file is `FOO.spad`.

Each layer is followed by a layerpic chunk which gives the graphviz graph information. The graphviz header information is here:

— **layerpic** —

```
digraph pic {
  fontsize=10;
  bgcolor="#ECEA81";
  node [shape=box, color=white, style=filled];
  ranksep=3.0;
  /* nodsep=inches */
  /* size="x,y", size="7.5,10" fits 8.5x11 page */
  /* ratio=auto */ /* page="x,y" */ /* generates multipage layout */
  /* margin=0 */

  "Category" [color="#4488FF"]
  "Category" -> "."

  "Domain" [color="#88FF44"]
  "Domain" -> "."

  "Package" [color="#FF4488"]
  "Package" -> "."
}
```

— — —

Completed spad files

Note well that none of the algebra stanzas should include these files in the preconditions otherwise we have an infinite compile loop. These files are originally bootstrapped from lisp code when we build the system for the first time but they are forcibly recompiled at the end of the build so they reflect current code (just in case someone changes the spad code but does not re-cache the generated lisp). If you add these files as preconditions (note that they are all in the **MID** directory rather than the **OUT** directory like everything else) then the final recompile will invalidate all of the rest of the algebra targets which will get rebuilt again causing these targets to be out of date. The rest of the loop is left up to the student.

The bootstrap process works because first we ask for the compiled lisp code stanzas (the `\${MID}/BAR.o` files), THEN we ask for the final algebra code stanzas (the `\${OUT}/BAR.o` files). This is a very subtle point so think it through carefully. Notice that this is the only layer calling for `\${MID}` files. All other layers call for `\${OUT}` files. If you break this the world will no longer compile so don't change it if you don't understand it.

```
LAYERBOOTSTRAP=${OUT}/XPR.o
```

— layer0 bootstrap —

```
LAYERBOOTSTRAP=\
  ${MID}/ABELGRP.o  ${MID}/ABELGRP-.o  ${MID}/ABELMON.o  ${MID}/ABELMON-.o \
  ${MID}/ABELSG.o   ${MID}/ABELSG-.o  ${MID}/ALAGG.o   ${MID}/BOOLEAN.o \
  ${MID}/CABMON.o   ${MID}/CHAR.o     ${MID}/CLAGG.o   ${MID}/CLAGG-.o \
  ${MID}/COMRING.o  ${MID}/DFLOAT.o   ${MID}/DIFRING.o  ${MID}/DIFRING-.o \
  ${MID}/DIVRING.o  ${MID}/DIVRING-.o  ${MID}/ENTIRER.o  ${MID}/ES.o \
  ${MID}/ES-.o      ${MID}/EUCDOM.o   ${MID}/EUCDOM-.o  ${MID}/FFIELDC.o \
  ${MID}/FFIELDC-.o ${MID}/FPS.o      ${MID}/FPS-.o    ${MID}/GCDDOM.o \
  ${MID}/GCDDOM-.o  ${MID}/HOAGG.o     ${MID}/HOAGG-.o  ${MID}/ILIST.o \
  ${MID}/INS.o      ${MID}/INS-.o     ${MID}/INT.o      ${MID}/INTDOM.o \
  ${MID}/INTDOM-.o  ${MID}/ISTRING.o  ${MID}/LIST.o     ${MID}/LNAGG.o \
  ${MID}/LNAGG-.o   ${MID}/LSAGG.o     ${MID}/LSAGG-.o   ${MID}/MONOID.o \
  ${MID}/MONOID-.o  ${MID}/MTSCAT.o    ${MID}/NNI.o      ${MID}/OINTDOM.o \
  ${MID}/ORDRING.o  ${MID}/ORDRING-.o  ${MID}/OUTFORM.o  ${MID}/PI.o \
  ${MID}/PRIMARR.o  ${MID}/POLYCAT.o   ${MID}/POLYCAT-.o  ${MID}/PSETCAT.o \
  ${MID}/PSETCAT-.o ${MID}/QFCAT.o     ${MID}/QFCAT-.o   ${MID}/RCAGG.o \
  ${MID}/RCAGG-.o   ${MID}/REF.o      ${MID}/RING.o     ${MID}/RING-.o \
  ${MID}/RNG.o      ${MID}/RNS.o      ${MID}/RNS-.o     ${MID}/SETAGG.o \
  ${MID}/SETAGG-.o  ${MID}/SETCAT.o    ${MID}/SETCAT-.o  ${MID}/SINT.o \
  ${MID}/STAGG.o    ${MID}/STAGG-.o   ${MID}/SYMBOL.o   ${MID}/TSETCAT.o \
  ${MID}/TSETCAT-.o ${MID}/UFD.o      ${MID}/UFD-.o     ${MID}/ULSCAT.o \
  ${MID}/UPOLYC.o   ${MID}/UPOLYC-.o  ${MID}/URAGG.o    ${MID}/URAGG-.o \
  ${MID}/VECTOR.o \
  layer0bootstrap
```

— layer0 copy —

```
LAYEROCOPY=\
```

```

${OUT}/ABELGRP.o  ${OUT}/ABELGRP-.o  ${OUT}/ABELMON.o  ${OUT}/ABELMON-.o \
${OUT}/ABELSG.o  ${OUT}/ABELSG-.o  ${OUT}/ALAGG.o  ${OUT}/BOOLEAN.o \
${OUT}/CABMON.o  ${OUT}/CHAR.o  ${OUT}/CLAGG.o  ${OUT}/CLAGG-.o \
${OUT}/COMRING.o  ${OUT}/DFLOAT.o  ${OUT}/DIFRING.o  ${OUT}/DIFRING-.o \
${OUT}/DIVRING.o  ${OUT}/DIVRING-.o  ${OUT}/ENTIRER.o  ${OUT}/ES.o \
${OUT}/ES-.o  ${OUT}/EUCDOM.o  ${OUT}/EUCDOM-.o  ${OUT}/FFIELDC.o \
${OUT}/FFIELDC-.o  ${OUT}/FPS.o  ${OUT}/FPS-.o  ${OUT}/GCDDOM.o \
${OUT}/GCDDOM-.o  ${OUT}/HOAGG.o  ${OUT}/HOAGG-.o  ${OUT}/ILIST.o \
${OUT}/INS.o  ${OUT}/INS-.o  ${OUT}/INT.o  ${OUT}/INTDOM.o \
${OUT}/INTDOM-.o  ${OUT}/ISTRING.o  ${OUT}/LIST.o  ${OUT}/LNAGG.o \
${OUT}/LNAGG-.o  ${OUT}/LSAGG.o  ${OUT}/LSAGG-.o  ${OUT}/MONOID.o \
${OUT}/MONOID-.o  ${OUT}/MTSCAT.o  ${OUT}/NNI.o  ${OUT}/OINTDOM.o \
${OUT}/ORDRING.o  ${OUT}/ORDRING-.o  ${OUT}/OUTFORM.o  ${OUT}/PI.o \
${OUT}/PRIMARR.o  ${OUT}/POLYCAT.o  ${OUT}/POLYCAT-.o  ${OUT}/PSETCAT.o \
${OUT}/PSETCAT-.o  ${OUT}/QFCAT.o  ${OUT}/QFCAT-.o  ${OUT}/RCAGG.o \
${OUT}/RCAGG-.o  ${OUT}/REF.o  ${OUT}/RING.o  ${OUT}/RING-.o \
${OUT}/RNG.o  ${OUT}/RNS.o  ${OUT}/RNS-.o  ${OUT}/SETAGG.o \
${OUT}/SETAGG-.o  ${OUT}/SETCAT.o  ${OUT}/SETCAT-.o  ${OUT}/SINT.o \
${OUT}/STAGG.o  ${OUT}/STAGG-.o  ${OUT}/SYMBOL.o  ${OUT}/TSETCAT.o \
${OUT}/TSETCAT-.o  ${OUT}/UFD.o  ${OUT}/UFD-.o  ${OUT}/ULSCAT.o \
${OUT}/UPOLYC.o  ${OUT}/UPOLYC-.o  ${OUT}/URAGG.o  ${OUT}/URAGG-.o \
${OUT}/VECTOR.o \
layer0copy

```

1.4.2 Layer 0

Depends on: Category Domain Package Bootstrap

Used by next layer: BASTYPE CFCAT KOERCE KONVERT TYPE

— layer0 —

```

LAYER0=\
${OUT}/AHYP.o  ${OUT}/ATADDVA.o  ${OUT}/ATCENRL.o  ${OUT}/ATCS.o \
${OUT}/ATAPPRO.o  ${OUT}/ATARBEX.o \
${OUT}/ATARBPR.o  ${OUT}/ATCANCL.o  ${OUT}/ATCANON.o  ${OUT}/ATCUNOR.o \
${OUT}/ATFINAG.o  ${OUT}/ATJACID.o  ${OUT}/ATLR.o  ${OUT}/ATLUNIT.o \
${OUT}/ATMULVA.o  ${OUT}/ATNOTHR.o  ${OUT}/ATNULSQ.o \
${OUT}/ATNZDIV.o  ${OUT}/ATPOSET.o  ${OUT}/ATRUNIT.o \
${OUT}/ATSHMUT.o \
${OUT}/ATTREG.o  ${OUT}/ATUNIKN.o \
${OUT}/BASTYPE.o  ${OUT}/BASTYPE-.o \
${OUT}/CFCAT.o  ${OUT}/ELTAB.o  ${OUT}/ESCONT1.o  ${OUT}/GRDEF.o \
${OUT}/INTBIT.o  ${OUT}/KOERCE.o  ${OUT}/KONVERT.o \
${OUT}/MAGCDOC.o  ${OUT}/MSYSCMD.o \
${OUT}/ODEIFTBL.o  ${OUT}/OM.o  ${OUT}/OMCONN.o  ${OUT}/OMDEV.o \
${OUT}/OUT.o  ${OUT}/PRIMCAT.o  ${OUT}/PRINT.o  ${OUT}/PTRANFN.o \
${OUT}/RFDIST.o  ${OUT}/RIDIST.o  ${OUT}/SPFCAT.o  ${OUT}/TYPE.o \
layer0done

```

— layerpic —

```

/* layer 0 */
/* depends on: Category Domain Package Bootstrap */
/* provides: BASTYPE CFCAT KOERCE KONVERT TYPE */

"AHYP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=AHYP"]
"AHYP" -> "Category"

"ATADDVA" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATADDVA"];
"ATADDVA" -> "Category"

"ATCENRL" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATCENRL"];
"ATCENRL" -> "Category"

"ATCS" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATCS"];
"ATCS" -> "Category"

"ATAPPRO" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATAPPRO"];
"ATAPPRO" -> "Category"

"ATARBEX" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATARBEX"];
"ATARBEX" -> "Category"

"ATARBPR" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATARBPR"];
"ATARBPR" -> "Category"

"ATCANCL" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATCANCL"];
"ATCANCL" -> "Category"

"ATCANON" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATCANON"];
"ATCANON" -> "Category"

"ATCUNOR" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATCUNOR"];
"ATCUNOR" -> "Category"

"ATFINAG" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATFINAG"];
"ATFINAG" -> "Category"

"ATJACID" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATJACID"];
"ATJACID" -> "Category"

"ATLR" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATLR"];
"ATLR" -> "Category"

"ATLUNIT" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATLUNIT"];
"ATLUNIT" -> "Category"

"ATMULVA" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATMULVA"];
"ATMULVA" -> "Category"

"ATNOTHR" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATNOTHR"];
"ATNOTHR" -> "Category"

```

```

"ATNULSQ" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATNULSQ"];
"ATNULSQ" -> "Category"

"ATNZDIV" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATNZDIV"];
"ATNZDIV" -> "Category"

"ATRUNIT" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATRUNIT"];
"ATRUNIT" -> "Category"

"ATSHMUT" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATSHMUT"];
"ATSHMUT" -> "Category"

"ATTREG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ATTREG"]
"ATTREG" -> "Category"

"ATUNIKN" [color=lightblue,href="bookvol10.2.pdf#nameddest=ATUNIKN"];
"ATUNIKN" -> "Category"

/* nobody seems to go to bastype by itself */
/* we combine these two to minimize edges in the graph */
/* note that koerce is duplicated */
"BASTYPE/KOERCE" [color="blue",href="bookvol10.2.pdf#nameddest=BASTYPE"]
"BASTYPE/KOERCE" -> "Category"
/*"BASTYPE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BASTYPE"]*/
/*"BASTYPE" -> "Category"*/
/*"BASTYPE" -> "BOOLEAN"*/
"KOERCE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=KOERCE"]
"KOERCE" -> "Category"

"BASTYPE-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BASTYPE"]
"BASTYPE-" -> "Domain"
/*"BASTYPE-" -> "BOOLEAN"*/

"CFCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=CFCAT"]
"CFCAT" -> "Category"

"ELTAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ELTAB"]
"ELTAB" -> "Category"

"ESCONT1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ESCONT1"]
"ESCONT1" -> "Package"
/*"ESCONT1" -> "DFLOAT"*/
/*"ESCONT1" -> "BOOLEAN"*/

"GRDEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GRDEF"]
"GRDEF" -> "Package"
/*"GRDEF" -> "BOOLEAN"*/

"INTBIT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTBIT"]
"INTBIT" -> "Package"
/*"INTBIT" -> "INT"*/

"KONVERT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=KONVERT"]

```

```

"KONVERT"  -> "Category"

"MAGCDOC"  [color="#4488FF",href="bookvol10.2.pdf#nameddest=MAGCDOC"]
"MAGCDOC"  -> "Category"

"MSYSCMD"  [color="#FF4488",href="bookvol10.4.pdf#nameddest=MSYSCMD"]
"MSYSCMD"  -> "Package"

"ODEIFTBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ODEIFTBL"]
"ODEIFTBL" -> "Domain"

"OM"       [color="#4488FF",href="bookvol10.2.pdf#nameddest=OM"]
"OM"       -> "Category"

"OMCONN"   [color="#88FF44",href="bookvol10.3.pdf#nameddest=OMCONN"]
"OMCONN"   -> "Domain"

"OMDEV"    [color="#88FF44",href="bookvol10.3.pdf#nameddest=OMDEV"]
"OMDEV"    -> "Domain"

"OUT"      [color="#FF4488",href="bookvol10.4.pdf#nameddest=OUT"]
"OUT"      -> "Package"
/* "OUT" -> {"STRING", "CHAR", "SINT", "OUTFORM", "LIST", "INT"} */
/* "OUT" -> {"PRIMARR", "A1AGG-", "ISTRING"} */

"PRIMCAT"  [color="#4488FF",href="bookvol10.2.pdf#nameddest=PRIMCAT"]
"PRIMCAT"  -> "Category"

"PRINT"    [color="#FF4488",href="bookvol10.4.pdf#nameddest=PRINT"]
"PRINT"    -> "Package"

"PTRANFN"  [color="#4488FF",href="bookvol10.2.pdf#nameddest=PTRANFN"]
"PTRANFN"  -> "Category"

"RFDIST"   [color="#FF4488",href="bookvol10.4.pdf#nameddest=RFDIST"]
"RFDIST"   -> "Package"
/*"RFDIST" -> {"INT"; "PI"; "NNI"; "BOOLEAN"; "SINT"} */

"RIDIST"   [color="#FF4488",href="bookvol10.4.pdf#nameddest=RIDIST"]
"RIDIST"   -> "Package"
/*"RIDIST" -> {"SINT"; "NNI"; "INT"} */

"SPFCAT"   [color="#4488FF",href="bookvol10.2.pdf#nameddest=SPFCAT"]
"SPFCAT"   -> "Category"

"TYPE"     [color="#4488FF",href="bookvol10.2.pdf#nameddest=TYPE"]
"TYPE"     -> "Category"

```

1.4.3 Layer 1

Depends on: BASTYPE CFCAT KOERCE KONVERT TYPE

Used by next layer: AGG ELTAGG FINITE FORTCAT IDPC IEVALAB LMODULE
MONAD ORDSET PATMAB RETRACT RMODULE SGROUP

— layer1 —

```
LAYER1=\
  ${OUT}/AGG.o      ${OUT}/AGG-.o      ${OUT}/ANON.o      ${OUT}/ANY1.o      \
  ${OUT}/BLMETCT.o \
  ${OUT}/COLOR.o    ${OUT}/COMBOPC.o    ${OUT}/COMM.o      ${OUT}/COMPAR.o    \
  ${OUT}/COMPPROP.o \
  ${OUT}/DROPT1.o   ${OUT}/ELTAGG.o    ${OUT}/ELTAGG-.o   ${OUT}/EQ2.o       \
  ${OUT}/EXIT.o     ${OUT}/FILECAT.o    ${OUT}/FINITE.o    ${OUT}/FINITE-.o   \
  ${OUT}/FNCAT.o    \
  ${OUT}/FORMULA1.o ${OUT}/FORTCAT.o   ${OUT}/IDPC.o      ${OUT}/IEVALAB.o   \
  ${OUT}/IEVALAB-.o ${OUT}/ITFUN2.o    ${OUT}/ITFUN3.o    ${OUT}/ITUPLE.o    \
  ${OUT}/LIST3.o    ${OUT}/LMODULE.o    ${OUT}/LOGIC.o     ${OUT}/LOGIC-.o    \
  ${OUT}/MAPHACK1.o ${OUT}/MAPHACK2.o   ${OUT}/MAPHACK3.o  ${OUT}/MAPPKG1.o   \
  ${OUT}/MAPPKG2.o  ${OUT}/MAPPKG3.o    ${OUT}/MKBCFUNC.o  ${OUT}/MKFUNC.o    \
  ${OUT}/MKRECORD.o ${OUT}/MKUCFUNC.o    ${OUT}/MONAD.o     ${OUT}/MONAD-.o    \
  ${OUT}/NIPROB.o   ${OUT}/NONE.o      ${OUT}/NONE1.o     ${OUT}/NUMINT.o    \
  ${OUT}/ODECAT.o   ${OUT}/ODEPROB.o    ${OUT}/OMENC.o     ${OUT}/ONECOMP2.o  \
  ${OUT}/OPTCAT.o   ${OUT}/OPTPROB.o    ${OUT}/ORDCOMP2.o  ${OUT}/ORDSET.o    \
  ${OUT}/ORDSET-.o  ${OUT}/PALETTE.o    ${OUT}/PARPCURV.o  ${OUT}/PARPC2.o    \
  ${OUT}/PARSCURV.o ${OUT}/PARSC2.o    ${OUT}/PARSURF.o   ${OUT}/PARSU2.o    \
  ${OUT}/PATAB.o    ${OUT}/PATMAB.o    ${OUT}/PATRES2.o   ${OUT}/PATTERN1.o  \
  ${OUT}/PDECAT.o   ${OUT}/PDEPROB.o    ${OUT}/PLOT1.o     ${OUT}/PPCURVE.o   \
  ${OUT}/PSCURVE.o  ${OUT}/REAL.o      ${OUT}/REPDB.o     ${OUT}/REPSQ.o     \
  ${OUT}/RESLATC.o  ${OUT}/RETRACT.o    ${OUT}/RETRACT-.o  ${OUT}/RMODULE.o   \
  ${OUT}/SEGBIND2.o ${OUT}/SEGCAT.o    ${OUT}/SETCATD.o   \
  ${OUT}/SEXCAT.o   ${OUT}/SGROUP.o    \
  ${OUT}/SGROUP-.o  ${OUT}/SPACEC.o    ${OUT}/SPLNODE.o   ${OUT}/STEP.o      \
  ${OUT}/STNSR.o    \
  ${OUT}/STREAM1.o  ${OUT}/STREAM2.o    ${OUT}/STREAM3.o   ${OUT}/SUCH.o       \
  ${OUT}/TEX1.o     ${OUT}/UDVO.o      ${OUT}/YSTREAM.o   \
layer1done
```

— layerpic —

```
/* layer 1 */
/* depends on: BASTYPE CFCAT KOERCE KONVERT TYPE */
/* provides: FORTCAT RETRACT SEGCAT */

"AGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=AGG"]
"AGG" -> "TYPE"
/*"AGG" -> "NNI"*/
/*"AGG" -> "INT"*/
```



```

"AGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AGG"]
"AGG-" -> "TYPE"
/*"AGG-" -> "NNI"*/
/*"AGG-" -> "INT"*/

"ANON" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ANON"]
/*"ANON" -> "SETCAT"*/
"ANON" -> "BASTYPE/KOERCE"
/*"ANON" -> "KOERCE"*/

"ANY1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ANY1"]
"ANY1" -> "TYPE"

"BLMETCT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BLMETCT"]
"BLMETCT" -> {"SETCAT", "BASTYPE/KOERCE"}

"CABMON" [color="#4488FF",href="bookvol10.2.pdf#nameddest=CABMON",
          shape=ellipse]
/*"CABMON" -> {"ABELMON"; "ABELSG"; "SETCAT"}*/
"CABMON" -> "BASTYPE/KOERCE"
/*"CABMON" -> "KOERCE"*/

"COLOR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=COLOR"]
/*"COLOR" -> "ABELSG"*/
/*"COLOR" -> "SETCAT"*/
"COLOR" -> "BASTYPE/KOERCE"
/*"COLOR" -> {"KOERCE"; "DFLOAT"; "INT"; "FPS-"; "RNS-"; "NNI"; "PI"}*/
/*"COLOR" -> "BOOLEAN"*/

"COMBOPC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=COMBOPC"]
"COMBOPC" -> "CFCAT"

"COMM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=COMM"]
/*"COMM" -> "SETCAT"*/
"COMM" -> "BASTYPE/KOERCE"
/*"COMM" -> {"KOERCE"; "BOOLEAN"}*/

"COMPAR" [color="#4488FF",href="bookvol10.2.pdf#nameddest=COMPAR"]
/*"COMPAR" -> "SETCAT"*/
"COMPAR" -> "BASTYPE/KOERCE"

"COMPPROP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=COMPPROP"]
/*"COMPPROP" -> "SETCAT"*/
"COMPPROP" -> "BASTYPE/KOERCE"
/*"COMPPROP" -> {"KOERCE"; "BOOLEAN"}*/

"DROPT1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DROPT1"]
"DROPT1" -> "TYPE"

"ELTAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ELTAGG"]
/*"ELTAGG" -> "ELTAB"*/
/*"ELTAGG" -> "SETCAT"*/
"ELTAGG" -> "BASTYPE/KOERCE"
/*"ELTAGG" -> "KOERCE"*/

```

```

"ELTAGG" -> "TYPE"

"ELTAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ELTAGG"]
/*"ELTAGG-" -> {"ELTAB"; "SETCAT"}*/
"ELTAGG-" -> "BASTYPE/KOERCE"
/*"ELTAGG-" -> "KOERCE"*/
"ELTAGG-" -> "TYPE"

"EQ2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EQ2"]
"EQ2" -> "TYPE"

"EXIT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EXIT"]
/*"EXIT" -> "SETCAT"*/
"EXIT" -> "BASTYPE/KOERCE"
/*"EXIT" -> "KOERCE"*/

"FILECAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FILECAT"]
/*"FILECAT" -> "SETCAT"*/
"FILECAT" -> "BASTYPE/KOERCE"
/*"FILECAT" -> "KOERCE"*/

"FINITE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FINITE"]
/*"FINITE" -> "SETCAT"*/
"FINITE" -> "BASTYPE/KOERCE"
/*"FINITE" -> "KOERCE"*/

"FNCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FNCAT"]
/*"FNCAT" -> "SETCAT"*/
"FNCAT" -> "BASTYPE/KOERCE"
/*"FNCAT" -> "KOERCE"*/

"FORMULA1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FORMULA1"]
/*"FORMULA1" -> "SETCAT"*/
"FORMULA1" -> "BASTYPE/KOERCE"
/*"FORMULA1" -> "KOERCE"*/

"FORTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FORTCAT"]
"FORTCAT" -> "TYPE"
/*"FORTCAT" -> "KOERCE"*/

"IDPC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=IDPC"]
/*"IDPC" -> "SETCAT"*/
"IDPC" -> "BASTYPE/KOERCE"
/*"IDPC" -> "KOERCE"*/

"IEVALAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=IEVALAB"]
/*"IEVALAB" -> "SETCAT"*/
"IEVALAB" -> "BASTYPE/KOERCE"
/*"IEVALAB" -> "KOERCE"*/
"IEVALAB" -> "TYPE"

"IEVALAB-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IEVALAB"]
/*"IEVALAB-" -> "SETCAT"*/
"IEVALAB-" -> "BASTYPE/KOERCE"

```

```

/*"IEVALAB-" -> "KOERCE"*/
"IEVALAB-" -> "TYPE"

"ITFUN2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ITFUN2"]
"ITFUN2" -> "TYPE"

"ITFUN3" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ITFUN3"]
"ITFUN3" -> "TYPE"

"ITUPLE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ITUPLE"]
/*"ITUPLE" -> "KOERCE"*/
"ITUPLE" -> "TYPE"

"LIST3" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LIST3"]
"LIST3" -> "TYPE"
/*"LIST3" -> {"INT"; "LIST"; "ILIST"}*/

"LOGIC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LOGIC"]
"LOGIC" -> "BASTYPE/KOERCE"

"LOGIC-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LOGIC"]
"LOGIC-" -> "BASTYPE/KOERCE"

"MAPHACK1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPHACK1"]
/*"MAPHACK1" -> "SETCAT"*/
"MAPHACK1" -> "BASTYPE/KOERCE"
/*"MAPHACK1" -> {"KOERCE"; "SINT"; "NNI"; "INT"}*/

"MAPHACK2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPHACK2"]
/*"MAPHACK2" -> "SETCAT"*/
"MAPHACK2" -> "BASTYPE/KOERCE"
/*"MAPHACK2" -> "KOERCE"*/

"MAPHACK3" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPHACK3"]
/*"MAPHACK3" -> "SETCAT"*/
"MAPHACK3" -> "BASTYPE/KOERCE"
/*"MAPHACK3" -> "KOERCE"*/

"MAPPKG1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPPKG1"]
/*"MAPPKG1" -> "SETCAT"*/
"MAPPKG1" -> "BASTYPE/KOERCE"
/*"MAPPKG1" -> {"KOERCE"; "SINT"; "NNI"; "INT"; "BOOLEAN"}*/

"MAPPKG2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPPKG2"]
/*"MAPPKG2" -> "SETCAT"*/
"MAPPKG2" -> "BASTYPE/KOERCE"
/*"MAPPKG2" -> "KOERCE"*/

"MAPPKG3" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPPKG3"]
/*"MAPPKG3" -> "SETCAT"*/
"MAPPKG3" -> "BASTYPE/KOERCE"
/*"MAPPKG3" -> "KOERCE"*/

"MKBCFUNC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MKBCFUNC"]

```

```

"MKBCFUNC" -> "KONVERT"
"MKBCFUNC" -> "TYPE"

"MKFUNC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MKFUNC"]
"MKFUNC" -> "KONVERT"
/*"MKFUNC" -> {"INT"; "LIST"}*/

"MKRECORD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MKRECORD"]
"MKRECORD" -> "TYPE"

"MKUCFUNC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MKUCFUNC"]
"MKUCFUNC" -> "KONVERT"
"MKUCFUNC" -> "TYPE"

"MONAD" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MONAD"]
/*"MONAD" -> "SETCAT"*/
"MONAD" -> "BASTYPE/KOERCE"
/*"MONAD" -> {"KOERCE"; "PI"; "NNI"; "INT"; "SINT"}*/

"MONAD-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MONAD"]
/*"MONAD-" -> "SETCAT"*/
"MONAD-" -> "BASTYPE/KOERCE"
/*"MONAD-" -> {"KOERCE"; "PI"; "NNI"; "INT"; "SINT"}*/

"NIPROB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NIPROB"]
/*"NIPROB" -> "SETCAT"*/
"NIPROB" -> "BASTYPE/KOERCE"
/*"NIPROB" -> "KOERCE"*/

"NONE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NONE"]
/*"NONE" -> "SETCAT"*/
"NONE" -> "BASTYPE/KOERCE"
/*"NONE" -> "KOERCE"*/

"NONE1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NONE1"]
"NONE1" -> "TYPE"

"NUMINT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=NUMINT"]
/*"NUMINT" -> "SETCAT"*/
"NUMINT" -> "BASTYPE/KOERCE"
/*"NUMINT" -> "KOERCE"*/

"ODECAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ODECAT"]
/*"ODECAT" -> "SETCAT"*/
"ODECAT" -> "BASTYPE/KOERCE"
/*"ODECAT" -> "KOERCE"*/

"ODEPROB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ODEPROB"]
/*"ODEPROB" -> "SETCAT"*/
"ODEPROB" -> "BASTYPE/KOERCE"
/*"ODEPROB" -> "KOERCE"*/

"OMENC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OMENC"]
/*"OMENC" -> "SETCAT"*/

```

```

"OMENC" -> "BASTYPE/KOERCE"
/*"OMENC" -> {"KOERCE"; "SINT"}*/

"ONECOMP2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ONECOMP2"]
/*"ONECOMP2" -> "SETCAT"*/
"ONECOMP2" -> "BASTYPE/KOERCE"
/*"ONECOMP2" -> "KOERCE"*/

"OPTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OPTCAT"]
/*"OPTCAT" -> "SETCAT"*/
"OPTCAT" -> "BASTYPE/KOERCE"
/*"OPTCAT" -> "KOERCE"*/

"OPTPROB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OPTPROB"]
/*"OPTPROB" -> "SETCAT"*/
"OPTPROB" -> "BASTYPE/KOERCE"
/*"OPTPROB" -> "KOERCE"*/

"ORDCOMP2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ORDCOMP2"]
/*"ORDCOMP2" -> "SETCAT"*/
"ORDCOMP2" -> "BASTYPE/KOERCE"
/*"ORDCOMP2" -> {"KOERCE"; "SINT"}*/

"ORDSET" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ORDSET"]
/*"ORDSET" -> "SETCAT"*/
"ORDSET" -> "BASTYPE/KOERCE"
/*"ORDSET" -> {"KOERCE"; "BOOLEAN"}*/

"ORDSET-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ORDSET"]
/*"ORDSET-" -> "SETCAT"*/
"ORDSET-" -> "BASTYPE/KOERCE"
/*"ORDSET-" -> {"KOERCE"; "BOOLEAN"}*/

"PALETTE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PALETTE"]
/*"PALETTE" -> "SETCAT"*/
"PALETTE" -> "BASTYPE/KOERCE"
/*"PALETTE" -> {"KOERCE"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/

"PARPCURV" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PARPCURV"]
"PARPCURV" -> "TYPE"
/*"PARPCURV" -> "NNI"*/
/*"PARPCURV" -> "INT"*/

"PARPC2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PARPC2"]
"PARPC2" -> "TYPE"
/*"PARPC2" -> "NNI"*/
/*"PARPC2" -> "INT"*/

"PARSCURV" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PARSCURV"]
"PARSCURV" -> "TYPE"
/*"PARSCURV" -> "NNI"*/
/*"PARSCURV" -> "INT"*/

"PARSC2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PARSC2"]

```

```

"PARSC2" -> "TYPE"
/*"PARSC2" -> "NNI"*/
/*"PARSC2" -> "INT"*/

"PARSURF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PARSURF"]
"PARSURF" -> "TYPE"
/*"PARSURF" -> "NNI"*/
/*"PARSURF" -> "INT"*/

"PARSU2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PARSU2"]
"PARSU2" -> "TYPE"
/*"PARSU2" -> "NNI"*/
/*"PARSU2" -> "INT"*/

"PATAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PATAB"]
"PATAB" -> "KONVERT"

"PATMAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PATMAB"]
/*"PATMAB" -> "SETCAT"*/
"PATMAB" -> "BASTYPE/KOERCE"
/*"PATMAB" -> "KOERCE"*/

"PATRES2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PATRES2"]
/*"PATRES2" -> "SETCAT"*/
"PATRES2" -> "BASTYPE/KOERCE"
/*"PATRES2" -> "KOERCE" */

"PATTERN1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PATTERN1"]
/*"PATTERN1" -> "SETCAT"*/
"PATTERN1" -> "BASTYPE/KOERCE"
/*"PATTERN1" -> "KOERCE"*/
"PATTERN1" -> "TYPE"
/*"PATTERN1" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "BOOLEAN"}*/

"PDECAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PDECAT"]
/*"PDECAT" -> "SETCAT"*/
"PDECAT" -> "BASTYPE/KOERCE"
/*"PDECAT" -> "KOERCE"*/

"PDEPROB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PDEPROB"]
/*"PDEPROB" -> "SETCAT"*/
"PDEPROB" -> "BASTYPE/KOERCE"
/*"PDEPROB" -> "KOERCE"*/

"PLOT1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PLOT1"]
"PLOT1" -> "KONVERT"

"PPCURVE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PPCURVE"]
"PPCURVE" -> "KOERCE"

"REAL" [color="#4488FF",href="bookvol10.2.pdf#nameddest=REAL"]
"REAL" -> "KONVERT"

"REF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=REF",

```

```

        shape=ellipse]
"REF" -> "TYPE"
/*"REF" -> "SETCAT"*/
"REF" -> "BASTYPE/KOERCE"
/*"REF" -> "KOERCE"*/

"REPDB" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REPDB"]
/*"REPDB" -> "SETCAT"*/
"REPDB" -> "BASTYPE/KOERCE"
/*"REPDB" -> {"KOERCE"; "PI"; "NNI"; "INT"}*/

"REPSQ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REPSQ"]
/*"REPSQ" -> "SETCAT"*/
"REPSQ" -> "BASTYPE/KOERCE"
/*"REPSQ" -> {"KOERCE"; "PI"; "NNI"; "INT"}*/

"RESLATC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RESLATC"]
"RESLATC" -> "TYPE"

"RETRACT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RETRACT"]
"RETRACT" -> "TYPE"

"RETRACT-" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RETRACT"]
"RETRACT-" -> "TYPE"

"RMODULE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RMODULE"]
/*"RMODULE" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
"RMODULE" -> "BASTYPE/KOERCE"
/*"RMODULE" -> "KOERCE"*/

"SEGBIND2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SEGBIND2"]
"SEGBIND2" -> "TYPE"

"SEGCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SEGCAT"]
"SEGCAT" -> "TYPE"

"SETCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SETCAT",
        shape=ellipse]
"SETCAT" -> "BASTYPE/KOERCE"
/*"SETCAT" -> "KOERCE"*/
/*"SETCAT" -> "SINT"*/

"SETCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SETCAT",
        shape=ellipse]
"SETCAT-" -> "BASTYPE/KOERCE"
/*"SETCAT-" -> {"KOERCE"; "SINT"}*/

"SETCATD" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SETCATD"]
/*"SETCATD" -> "SETCAT"*/
"SETCATD" -> "BASTYPE/KOERCE"

"SEXCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SEXCAT"]
/*"SEXCAT" -> "SETCAT"*/
"SEXCAT" -> "BASTYPE/KOERCE"

```

```

/*"SEXCAT" -> "KOERCE"*/

/* We combine LMODULE and SGROUP to minimize edges */
"LMODULE/SGROUP" [color="blue",href="bookvol10.2.pdf#nameddest=LMODULE"]
"LMODULE/SGROUP" -> "BASTYPE/KOERCE"
/*"LMODULE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LMODULE"]*/
/*"LMODULE" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"LMODULE" -> {"BASTYPE/KOERCE"; "KOERCE"}*/

"SGROUP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SGROUP"]
/*"SGROUP" -> "SETCAT"*/
"SGROUP" -> "BASTYPE/KOERCE"
/*"SGROUP" -> "KOERCE"*/

"SGROUP-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SGROUP"]
/*"SGROUP" -> "SETCAT"*/
"SGROUP-" -> "BASTYPE/KOERCE"
/*"SGROUP-" -> "KOERCE"*/

"SPACEC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SPACEC"]
/*"SPACEC" -> "SETCAT"*/
"SPACEC" -> "BASTYPE/KOERCE"
/*"SPACEC" -> "KOERCE"*/

"SPLNODE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SPLNODE"]
/*"SPLNODE" -> "SETCAT"*/
"SPLNODE" -> "BASTYPE/KOERCE"
/*"SPLNODE" -> {"KOERCE"; "AGG"}*/
"SPLNODE" -> "TYPE"
/*"SPLNODE" -> "BOOLEAN"*/

"STEP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=STEP"]
/*"STEP" -> "SETCAT"*/
"STEP" -> "BASTYPE/KOERCE"
/*"STEP" -> "KOERCE"*/

"STNSR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STNSR"]
"STNSR" -> "TYPE"

"STREAM1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STREAM1"]
"STREAM1" -> "TYPE"

"STREAM2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STREAM2"]
"STREAM2" -> "TYPE"

"STREAM3" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STREAM3"]
"STREAM3" -> "TYPE"

"SUCH" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SUCH"]
/*"SUCH" -> "SETCAT"*/
"SUCH" -> "BASTYPE/KOERCE"
/*"SUCH" -> "KOERCE"*/

"TEX1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TEX1"]

```



```

/*"TEX1" -> "SETCAT"*/
"TEX1" -> "BASTYPE/KOERCE"
/*"TEX1" -> "KOERCE"*/

"UDVO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UDVO"]
/*"UDVO" -> {"INT"; "LIST"; "ILIST"; "ORDSET"; "SETCAT"}*/
"UDVO" -> "BASTYPE/KOERCE"
/*"UDVO" -> "KOERCE"*/

"YSTREAM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=YSTREAM"]
"YSTREAM" -> "TYPE"
/*"YSTREAM" -> {"INT"; "SINT"; "NNI"}*/

```

1.4.4 Layer 2

Depends on: AGG ELTAGG FINITE FORTCAT IDPC IEVALAB LMODULE MONAD
ORDSET PATMAB RETRACT RMODULE SGROUP SETCATD

Used by next layer: BMODULE CACHSET ELEMFUN EVALAB GROUP IXAGG MON-
ADWU NARNG OASGP PDRING

— layer2 —

```

LAYER2=\
  ${OUT}/AFSPCAT.o \
  ${OUT}/API.o      ${OUT}/ASP29.o    ${OUT}/ATRIG.o    ${OUT}/ATRIG-.o \
  ${OUT}/BEZIER.o   ${OUT}/BLHN.o     \
  ${OUT}/BLQT.o     ${OUT}/BMODULE.o  ${OUT}/CACHSET.o \
  ${OUT}/CHARNZ.o   ${OUT}/CHARZ.o    ${OUT}/DVARCAT.o  ${OUT}/DVARCAT-.o \
  ${OUT}/ELEMFUN.o  ${OUT}/ELEMFUN-.o  ${OUT}/ESTOOLS2.o ${OUT}/EVALAB.o \
  ${OUT}/EVALAB-.o  ${OUT}/FAMONC.o    ${OUT}/FCOMP.o    ${OUT}/FEVALAB.o \
  ${OUT}/FEVALAB-.o ${OUT}/FMC.o      ${OUT}/FMFUN.o    ${OUT}/FORTFN.o \
  ${OUT}/FPATMAB.o  ${OUT}/FVC.o       ${OUT}/FVFUN.o    ${OUT}/GROUP.o \
  ${OUT}/GROUP-.o   ${OUT}/IDPAG.o    ${OUT}/IDPAM.o    ${OUT}/IDPO.o \
  ${OUT}/INCRMAPS.o ${OUT}/INTRET.o    ${OUT}/IXAGG.o    ${OUT}/IXAGG-.o \
  ${OUT}/KERNEL2.o  ${OUT}/LALG.o     ${OUT}/LALG-.o    ${OUT}/LINEXP.o \
  ${OUT}/MODMONOM.o ${OUT}/MONADWU.o   ${OUT}/MONADWU-.o ${OUT}/MRF2.o \
  ${OUT}/NARNG.o    ${OUT}/NARNG-.o   ${OUT}/NSUP2.o    ${OUT}/OASGP.o \
  ${OUT}/ODVAR.o    ${OUT}/OPQUERY.o  ${OUT}/ORDFIN.o   ${OUT}/ORDMON.o \
  ${OUT}/PATMATCH.o ${OUT}/PERMCAT.o  ${OUT}/PDRING.o   ${OUT}/PDRING-.o \
  ${OUT}/PLACESC.o  ${OUT}/PRSPCAT.o \
  ${OUT}/SDVAR.o    ${OUT}/SEGXCAT.o  ${OUT}/SUP2.o     ${OUT}/TRIGCAT.o \
  ${OUT}/TRIGCAT-.o ${OUT}/ULS2.o     ${OUT}/UP2.o \
  layer2done

```

— layerpic —

```

/* layer 2 */
/* AGG ELTAGG FINITE FORTCAT IDPC IEVALAB LMODULE MONAD ORDSET */

```

```

/* PATMAB RETRACT RMODULE SEGCAT SGROUP SETCATD */

"AFSPCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=AFSPCAT",
           shape=ellipse]
"AFSPCAT" -> "SETCATD"
/*"AFSPCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"ABELGRP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ABELGRP",
           shape=ellipse]
/*"ABELGRP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"ABELGRP" -> {"KOERCE"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"ABELGRP" -> "LMODULE/SGROUP"
/*"ABELGRP" -> "INT"*/

"ABELGRP-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ABELGRP",
            shape=ellipse]
/*"ABELGRP-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"ABELGRP-" -> {"KOERCE"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"ABELGRP-" -> "LMODULE/SGROUP"
/*"ABELGRP-" -> "INT"*/

"ABELMON" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ABELMON",
           shape=ellipse]
/*"ABELMON" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"}*/
/*"ABELMON" -> {"ABELGRP"; "CABMON"; "SGROUP"; "MONOID"}*/
"ABELMON" -> "LMODULE/SGROUP"
/*"ABELMON" -> {"NNI"; "INT"}*/

"ABELMON-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ABELMON",
            shape=ellipse]
/*"ABELMON-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"}*/
/*"ABELMON-" -> {"ABELGRP"; "CABMON"; "SGROUP"; "MONOID"}*/
"ABELMON-" -> "LMODULE/SGROUP"
/*"ABELMON-" -> {"NNI"; "INT"}*/

"ABELSG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ABELSG",
          shape=ellipse]
/*"ABELSG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"ABELSG" -> {"CABMON"; "ABELMON"; "SGROUP"; "MONOID"}*/
"ABELSG" -> "LMODULE/SGROUP"

"ABELSG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ABELSG",
            shape=ellipse]
/*"ABELSG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"ABELSG-" -> {"CABMON"; "ABELMON"; "SGROUP"; "MONOID"}*/
"ABELSG-" -> "LMODULE/SGROUP"

"API" [color="#FF4488",href="bookvol10.4.pdf#nameddest=API"]
/*"API" -> {"INT"; "LIST"; "ILIST"}*/
"API" -> "ORDSET"
/*"API" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"ATRIG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ATRIG"]
/*"ATRIG" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/

```

```

/*"ATRIG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"ATRIG" -> "LMODULE/SGROUP"

"ATRIG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ATRIG"]
/*"ATRIG-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ATRIG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"ATRIG-" -> "LMODULE/SGROUP"

"BEZIER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=BEZIER"]
/*"BEZIER" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"BEZIER" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"} */
"BEZIER" -> "LMODULE/SGROUP"

"BLQT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BLQT"]
"BLQT" -> "BLMETCT"
/*"BLQT" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"BLQT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BLQT"]
"BLQT" -> "BLMETCT"
/*"BLQT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"BLQT" -> {"STAGG-"; "PI"; "NNI"}*/

"BMODULE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BMODULE"]
/*"BMODULE" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"BMODULE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"BMODULE" -> "LMODULE/SGROUP"
"BMODULE" -> "RMODULE"

"CACHSET" [color="#4488FF",href="bookvol10.2.pdf#nameddest=CACHSET"]
"CACHSET" -> "ORDSET"
/*"CACHSET" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"CHARNZ" [color="#4488FF",href="bookvol10.2.pdf#nameddest=CHARNZ"]
/*"CHARNZ" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"CHARNZ" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"CHARNZ" -> "LMODULE/SGROUP"

"CHARZ" [color="#4488FF",href="bookvol10.2.pdf#nameddest=CHARZ"]
/*"CHARZ" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"CHARZ" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"CHARZ" -> "LMODULE/SGROUP"

"DIFRING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DIFRING",
           shape=ellipse]
/*"DIFRING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DIFRING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"DIFRING" -> "LMODULE/SGROUP"
/*"DIFRING" -> {"SINT"; "NNI"; "INT"}*/

"DIFRING-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIFRING",
           shape=ellipse]
/*"DIFRING-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DIFRING-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"DIFRING-" -> "LMODULE/SGROUP"

```

```

/*"DIFRING-" -> {"SINT"; "NNI"; "INT"}*/

"DVARCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DVARCAT"]
"DVARCAT" -> "ORDSET"
/*"DVARCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"DVARCAT" -> "RETRACT"
/*"DVARCAT" -> {"NNI"; "INT"; "BOOLEAN"}*/

"DVARCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DVARCAT"]
"DVARCAT-" -> "ORDSET"
/*"DVARCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"DVARCAT-" -> "RETRACT"
/*"DVARCAT-" -> {"NNI"; "INT"; "BOOLEAN"}*/

"ELEMFUN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ELEMFUN"]
/*"ELEMFUN" -> "MONOID"*/
"ELEMFUN" -> "SGROUP"
/*"ELEMFUN" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"ELEMFUN-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ELEMFUN"]
/*"ELEMFUN-" -> "MONOID"*/
"ELEMFUN-" -> "SGROUP"
/*"ELEMFUN-" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"ESTOOLS2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ESTOOLS2"]
/*"ESTOOLS2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ESTOOLS2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"ESTOOLS2" -> "LMODULE/SGROUP"

"EVALAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=EVALAB"]
"EVALAB" -> "IEVALAB"
/*"EVALAB" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"EVALAB-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EVALAB"]
"EVALAB-" -> "IEVALAB"
/*"EVALAB-" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"FAMONC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FAMONC"]
/*"FAMONC" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"FAMONC" -> "RETRACT"

"FCOMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FCOMP"]
"FCOMP" -> "ORDSET"
/*"FCOMP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "BOOLEAN"}*/

"FEVALAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FEVALAB"]
/*"FEVALAB" -> {"ELTAB"; "EVALAB"}*/
"FEVALAB" -> "IEVALAB"
/*"FEVALAB" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"FEVALAB-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FEVALAB"]
/*"FEVALAB-" -> {"ELTAB"; "EVALAB"}*/
"FEVALAB-" -> "IEVALAB"
/*"FEVALAB-" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

```

```

"FMC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FMC"]
"FMC" -> "FORTCAT"
/*"FMC" -> {"TYPE"; "KOERCE"}*/

"FMFUN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FMFUN"]
"FMFUN" -> "FORTCAT"
/*"FMFUN" -> {"TYPE"; "KOERCE"}*/

"FORTFN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FORTFN"]
"FORTFN" -> "FORTCAT"
/*"FORTFN" -> {"TYPE"; "KOERCE"}*/

"FPATMAB" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FPATMAB"]
/*"FPATMAB" -> "TYPE"*/
"FPATMAB" -> "PATMAB"
/*"FPATMAB" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"FVC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FVC"]
"FVC" -> "FORTCAT"
/*"FVC" -> {"TYPE"; "KOERCE"}*/

"FVFUN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FVFUN"]
"FVFUN" -> "FORTCAT"
/*"FVFUN" -> {"TYPE"; "KOERCE"}*/

"GROUP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=GROUP"]
/*"GROUP" -> "MONOID"*/
"GROUP" -> "SGROUP"
/*"GROUP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"}*/

"GROUP-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GROUP"]
/*"GROUP-" -> "MONOID"*/
"GROUP-" -> "SGROUP"
/*"GROUP-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"}*/

"IDPAG" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IDPAG"]
/*"IDPAG" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"IDPAG" -> {"BASTYPE"; "KOERCE"}*/
"IDPAG" -> "IDPC"
"IDPAG" -> "ORDSET"
/*"IDPAG" -> {"INT"; "BOOLEAN"; "LIST"; "ILIST"}*/

"IDPAM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IDPAM"]
/*"IDPAM" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"IDPAM" -> "IDPC"
"IDPAM" -> "ORDSET"
/*"IDPAM" -> {"INT"; "LIST"; "ILIST"; "BOOLEAN"; "NNI"}*/

"IDPO" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IDPO"]
"IDPO" -> "IDPC"
/*"IDPO" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"IDPO" -> "ORDSET"
/*"IDPO" -> {"INT"; "LIST"; "BOOLEAN"; "ILIST"}*/

```

```

"INCRMAPS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INCRMAPS"]
/*"INCRMAPS" -> "MONOID"*/
"INCRMAPS" -> "SGROUP"
/*"INCRMAPS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ABELSG"}*/

"INTRET" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTRET"]
"INTRET" -> "RETRACT"

"IXAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=IXAGG"]
/*"IXAGG" -> "HOAGG"*/
"IXAGG" -> "AGG"
/*"IXAGG" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
"IXAGG" -> "ELTAGG"
/*"IXAGG" -> "ELTAB"*/
"IXAGG" -> "ORDSET"

"IXAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IXAGG"]
/*"IXAGG-" -> "HOAGG"*/
"IXAGG-" -> "AGG"
/*"IXAGG-" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
"IXAGG-" -> "ELTAGG"
/*"IXAGG-" -> "ELTAB"*/
"IXAGG-" -> "ORDSET"

"KERNEL2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=KERNEL2"]
"KERNEL2" -> "ORDSET"
/*"KERNEL2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"; "NNI"}*/

"LALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LALG"]
/*"LALG" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LALG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"LALG" -> "LMODULE/SGROUP"

"LALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LALG"]
/*"LALG-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LALG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"LALG-" -> "LMODULE/SGROUP"

"LINEXP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LINEXP"]
/*"LINEXP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LINEXP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"LINEXP" -> "LMODULE/SGROUP"

"MODMONOM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MODMONOM"]
"MODMONOM" -> "ORDSET"
/*"MODMONOM" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"MONADWU" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MONADWU"]
"MONADWU" -> "MONAD"
/*"MONADWU" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"; "SINT"}*/

"MONADWU-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MONADWU"]
"MONADWU-" -> "MONAD"

```

```

/*"MONADWU-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"; "SINT"}*/

"MONOID" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MONOID",
          shape=ellipse]
"MONOID" -> "SGROUP"
/*"MONOID" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/

"MONOID-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MONOID",
           shape=ellipse]
"MONOID-" -> "SGROUP"
/*"MONOID-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/

"MRF2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MRF2"]
/*"MRF2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MRF2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"MRF2" -> "LMODULE/SGROUP"

"NARNG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=NARNG"]
/*"NARNG" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NARNG" -> {"BASTYPE"; "KOERCE"}*/
"NARNG" -> "MONAD"

"NARNG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NARNG"]
/*"NARNG-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NARNG-" -> {"BASTYPE"; "KOERCE"}*/
"NARNG-" -> "MONAD"

"NSUP2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NSUP2"]
/*"NSUP2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"NSUP2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"NSUP2" -> "LMODULE/SGROUP"

"OASGP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OASGP"]
"OASGP" -> "ORDSET"
/*"OASGP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"}*/

"ODVAR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ODVAR"]
/*"ODVAR" -> "DVARCAT"*/
"ODVAR" -> "ORDSET"
/*"ODVAR" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"ODVAR" -> "RETRACT"

"OPQUERY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OPQUERY"]
"OPQUERY" -> "ORDSET"
/*"OPQUERY" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"ORDFIN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ORDFIN"]
"ORDFIN" -> "ORDSET"
/*"ORDFIN" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"ORDFIN" -> "FINITE"

"ORDMON" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ORDMON"]
"ORDMON" -> "ORDSET"
/*"ORDMON" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "MONOID"}*/

```

```

"ORDMON" -> "SGROUP"

"PATMATCH" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PATMATCH"]
/*"PATMATCH" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"PATMATCH" -> "PATMAB"
/*"PATMATCH" -> {"KONVERT"; "BOOLEAN"}*/
"PATMATCH" -> "RETRACT"
/*"PATMATCH" -> {"INT"; "LIST"; "ILIST"; "RING"; "RNG"; "ABELGRP"}*/
/*"PATMATCH" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
"PATMATCH" -> "LMODULE/SGROUP"

"PDRING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PDRING"]
/*"PDRING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PDRING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"PDRING" -> "LMODULE/SGROUP"
/*"PDRING" -> {"SINT"; "NNI"; "INT"}*/

"PDRING-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PDRING"]
/*"PDRING-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PDRING-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"PDRING-" -> "LMODULE/SGROUP"
/*"PDRING-" -> {"SINT"; "NNI"; "INT"}*/

"PERMCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PERMCAT"]
/*"PERMCAT" -> {"GROUP"; "MONOID"}*/
"PERMCAT" -> "SGROUP"
/*"PERMCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"PERMCAT" -> "ORDSET"
"PERMCAT" -> "FINITE"

"PI" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PI",
      shape=ellipse]
/*"PI" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"PI" -> "ORDSET"
/*"PI" -> "MONOID"*/
"PI" -> "SGROUP"
/*"PI" -> {"NNI"; "INT"}*/

"RING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RING",
        shape=ellipse]
/*"RING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"RING" -> "LMODULE/SGROUP"

"RING-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RING",
        shape=ellipse]
/*"RING-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RING-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"RING-" -> "LMODULE/SGROUP"

"RNG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RNG",
       shape=ellipse]
/*"RNG" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RNG" -> "KOERCE"*/

```



```

"RNG" -> "SGROUP"

"PLACESC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PLACESC",
           shape=ellipse]
"PLACESC" -> "SETCATD"
/*"PLACESC" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"PRSPCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PRSPCAT",
           shape=ellipse]
"PRSPCAT" -> "SETCATD"
/*"PRSPCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/

"SDVAR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SDVAR"]
/*"SDVAR" -> "DVARCAT"*/
"SDVAR" -> "ORDSET"
/*"SDVAR" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"SDVAR" -> "RETRACT"
/*"SDVAR" -> {"NNI"; "INT"}*/

"SEGXCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SEGXCAT"]
"SEGXCAT" -> "SEGCAT"
/*"SEGXCAT" -> "TYPE"*/

"SUP2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SUP2"]
/*"SUP2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SUP2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"SUP2" -> "LMODULE/SGROUP"

"TRIGCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=TRIGCAT"]
/*"TRIGCAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"TRIGCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"TRIGCAT" -> "LMODULE/SGROUP"

"TRIGCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TRIGCAT"]
/*"TRIGCAT-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"TRIGCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"TRIGCAT-" -> "LMODULE/SGROUP"

"ULS2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ULS2"]
/*"ULS2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ULS2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"ULS2" -> "LMODULE/SGROUP"

"UP2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UP2"]
/*"UP2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UP2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
"UP2" -> "LMODULE/SGROUP"

```

1.4.5 Layer 3

Depends on: BMODULE CACHSET ELEMFUN EVALAB GROUP IXAGG MONADWU
NARNG OASGP PDRING

Used by next layer: BGAGG BRAGG ELAGG- GRMOD MODULE OAMON

— layer3 —

```
LAYER3=\
  ${OUT}/AUTOMOR.o  ${OUT}/BGAGG.o  ${OUT}/BGAGG-.o  ${OUT}/BRAGG.o  \
  ${OUT}/BRAGG-.o  ${OUT}/CARTEN2.o  ${OUT}/CHARPOL.o  ${OUT}/COMPLEX2.o  \
  ${OUT}/DIFEXT.o  ${OUT}/DIFEXT-.o  ${OUT}/DLAGG.o  ${OUT}/DSTRCAT.o  \
  ${OUT}/ELAGG.o  \
  ${OUT}/ELAGG-.o  ${OUT}/ES1.o  ${OUT}/ES2.o  ${OUT}/GRMOD.o  \
  ${OUT}/GRMOD-.o  ${OUT}/HYPCAT.o  ${OUT}/HYPCAT-.o  ${OUT}/LORER.o  \
  ${OUT}/MKCHSET.o  \
  ${OUT}/MODRING.o  ${OUT}/MODULE.o  ${OUT}/MODULE-.o  ${OUT}/NASRING.o  \
  ${OUT}/NASRING-.o  ${OUT}/OAMON.o  ${OUT}/SORTPAK.o  ${OUT}/ZMOD.o  \
layer3done
```

—————

— layerpic —

```
/* layer 3 */
/* depends on: BMODULE CACHSET ELEMFUN EVALAB GROUP IXAGG MONADWU NARNG */
/* OASGP PDRING */

"AUTOMOR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AUTOMOR"]
"AUTOMOR" -> "GROUP"
/*"AUTOMOR" -> {"MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"AUTOMOR" -> {"ELTAB"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"AUTOMOR" -> {"ABELSG"; "LMODULE"; "INT"; "SINT"; "NNI"}*/

"BGAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BGAGG"]
/*"BGAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"BGAGG" -> "EVALAB"
/*"BGAGG" -> "IEVALAB"*/

"BGAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BGAGG"]
/*"BGAGG-" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"BGAGG-" -> "EVALAB"
/*"BGAGG-" -> "IEVALAB"*/

"BRAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BRAGG"]
/*"BRAGG" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"BRAGG" -> "KOERCE"*/
"BRAGG" -> "EVALAB"
/*"BRAGG" -> {"IEVALAB"; "BOOLEAN"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"BRAGG" -> {"STAGG-"; "SETAGG"; "CLAGG"; "KONVERT"; "NNI"}*/

"BRAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BRAGG"]
/*"BRAGG-" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
```

```

/*"BRAGG-" -> "KOERCE"*/
"BRAGG-" -> "EVALAB"
/*"BRAGG-" -> {"IEVALAB"; "BOOLEAN"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"BRAGG-" -> {"STAGG-"; "SETAGG"; "CLAGG"; "KONVERT"; "NNI"}*/

"CARTEN2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CARTEN2"]
/*"CARTEN2" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CARTEN2" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"CARTEN2" -> {"MONOID"; "LMODULE"}*/
"CARTEN2" -> "BMODULE"
/*"CARTEN2" -> "RMODULE"*/

"CHARPOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CHARPOL"]
/*"CHARPOL" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CHARPOL" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"CHARPOL" -> {"MONOID"; "LMODULE"}*/
"CHARPOL" -> "BMODULE"
/*"CHARPOL" -> {"RMODULE"; "NNI"; "INT"; "SINT"; "PI"}*/

"COMPLEX2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMPLEX2"]
/*"COMPLEX2" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"COMPLEX2" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"COMPLEX2" -> {"MONOID"; "LMODULE"}*/
"COMPLEX2" -> "BMODULE"
/*"COMPLEX2" -> "RMODULE"*/

"COMRING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=COMRING",
           shape=ellipse]
/*"COMRING" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"COMRING" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"COMRING" -> {"MONOID"; "LMODULE"}*/
"COMRING" -> "BMODULE"
/*"COMRING" -> "RMODULE"*/

"DIFEXT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DIFEXT"]
/*"DIFEXT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DIFEXT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DIFEXT" -> "DIFRING"*/
"DIFEXT" -> "PDRING"
/*"DIFEXT" -> {"SINT"; "NNI"; "INT"}*/

"DIFEXT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIFEXT"]
/*"DIFEXT-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DIFEXT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"DIFEXT-" -> {"LMODULE"; "DIFRING"}*/
"DIFEXT-" -> "PDRING"
/*"DIFEXT-" -> {"SINT"; "NNI"; "INT"}*/

"DLAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DLAGG"]
/*"DLAGG" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"DLAGG" -> "EVALAB"
/*"DLAGG" -> "IEVALAB"*/

"DSTRCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DSTRCAT"]

```

```

/*"DSTRCAT" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
"DSTRCAT" -> "EVALAB"
/*"DSTRCAT" -> {"KOERCE"; "IEVALAB"}*/

"ELAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ELAGG"]
/*"ELAGG" -> "LNAGG"*/
"ELAGG" -> "IXAGG"
/*"ELAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"ELAGG" -> "EVALAB"
/*"ELAGG" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "NNI"}*/
/*"ELAGG" -> {"INT"; "ORDSET"}*/

"ELAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ELAGG"]
/*"ELAGG-" -> "LNAGG"*/
"ELAGG-" -> "IXAGG"
/*"ELAGG-" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"ELAGG-" -> "EVALAB"
/*"ELAGG-" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "NNI"}*/
/*"ELAGG-" -> {"INT"; "ORDSET"}*/

/* Note that ENTIRER has a circular self reference */
"ENTIRER" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ENTIRER",
           shape=ellipse]
/*"ENTIRER" -> {"ENTIRER"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ENTIRER" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ENTIRER" -> {"MONOID"; "LMODULE"}*/
"ENTIRER" -> "BMODULE"
/*"ENTIRER" -> "RMODULE"*/

"ES1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ES1"]
/*"ES1" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"ES1" -> "IEVALAB"*/
"ES1" -> "EVALAB"
/*"ES1" -> "TYPE"*/

"ES2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ES2"]
/*"ES2" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"ES2" -> "IEVALAB"*/
"ES2" -> "EVALAB"

"GRMOD" [color="#4488FF",href="bookvol10.2.pdf#nameddest=GRMOD"]
/*"GRMOD" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "COMRING"; "RING"; "RNG"}*/
/*"GRMOD" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"GRMOD" -> {"MONOID"; "LMODULE"}*/
"GRMOD" -> "BMODULE"
/*"GRMOD" -> "RMODULE"*/

"GRMOD-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GRMOD"]
/*"GRMOD-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "COMRING"; "RING"; "RNG"}*/
/*"GRMOD-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"GRMOD-" -> {"MONOID"; "LMODULE"}*/
"GRMOD-" -> "BMODULE"
/*"GRMOD-" -> "RMODULE"*/

```

```

"HYPCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=HYPCAT"]
/*"HYPCAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"HYPCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"HYPCAT" -> "LMODULE"*/
"HYPCAT" -> "ELEMFUN"

"HYPCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HYPCAT"]
/*"HYPCAT-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"HYPCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"HYPCAT-" -> "LMODULE"*/
"HYPCAT-" -> "ELEMFUN"

"LORER" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LORER"]
/*"LORER" -> {"ENTIRER"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LORER" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"LORER" -> {"MONOID"; "LMODULE"; "RMODULE"}*/
"LORER" -> "BMODULE"

"MKCHSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MKCHSET"]
"MKCHSET" -> "CACHSET"
/*"MKCHSET" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/

"MODRING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MODRING"]
/*"MODRING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MODRING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MODRING" -> {"LMODULE"; "COMRING"}*/
"MODRING" -> "BMODULE"
/*"MODRING" -> {"RMODULE"; "BOOLEAN"}*/

"MODULE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MODULE"]
/*"MODULE" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MODULE" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"MODULE" -> {"MONOID"; "LMODULE"}*/
"MODULE" -> "BMODULE"
/*"MODULE" -> "RMODULE"*/

"MODULE-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MODULE"]
/*"MODULE-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MODULE-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"MODULE-" -> {"MONOID"; "LMODULE"}*/
"MODULE-" -> "BMODULE"
/*"MODULE-" -> "RMODULE"*/

"NASRING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=NASRING"]
"NASRING" -> "NARNG"
/*"NASRING" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NASRING" -> {"BASTYPE"; "KOERCE"; "MONAD"}*/
"NASRING" -> "MONADWU"

"NASRING-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NASRING"]
"NASRING-" -> "NARNG"
/*"NASRING-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NASRING-" -> {"BASTYPE"; "KOERCE"; "MONAD"}*/
"NASRING-" -> "MONADWU"

```

```

"OAMON" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OAMON"]
"OAMON" -> "OASGP"
/*"OAMON" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"}*/

"SETAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SETAGG",
          shape=ellipse]
/*"SETAGG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "CLAGG"; "HOAGG"; "AGG"}*/
/*"SETAGG" -> "TYPE"*/
"SETAGG" -> "EVALAB"
/*"SETAGG" -> {"IEVALAB"; "KONVERT"}*/

"SETAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SETAGG",
           shape=ellipse]
/*"SETAGG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "CLAGG"; "HOAGG"; "AGG"}*/
/*"SETAGG-" -> "TYPE"*/
"SETAGG-" -> "EVALAB"
/*"SETAGG-" -> {"IEVALAB"; "KONVERT"}*/

"ORTPAK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ORTPAK"]
/*"ORTPAK" -> "TYPE"*/
"ORTPAK" -> "IXAGG"
/*"ORTPAK" -> {"HOAGG"; "AGG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"ORTPAK" -> "EVALAB"
/*"ORTPAK" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "SINT"; "NNI"; "INT"}*/
/*"ORTPAK" -> {"BOOLEAN"; "PI"; "ORDSET"; "URAGG"; "RCAGG"}*/

"ZMOD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ZMOD"]
/*"ZMOD" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ZMOD" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ZMOD" -> "MODULE"*/
"ZMOD" -> "MODULE"
/*"ZMOD" -> {"MODULE"; "FINITE"; "KONVERT"; "STEP"; "SINT"; "INT"}*/
/*"ZMOD" -> {"PI"; "NNI"; "INS-"; "EUCDOM-"}*/

```

1.4.6 Layer 4

Depends on: BGAGG BRAGG ELAGG- GRMOD MODULE OAMON

Used by next layer: ALGEBRA ALGEBRA- BTCAT OCAMON QUAGG SKAGG

— layer4 —

```

LAYER4=\
  ${OUT}/ALGEBRA.o ${OUT}/ALGEBRA-.o ${OUT}/BTCAT.o ${OUT}/BTCAT-.o \
  ${OUT}/FMCAT.o ${OUT}/IDPOAM.o ${OUT}/IFAMON.o ${OUT}/GRALG.o \
  ${OUT}/GRALG-.o ${OUT}/NAALG.o ${OUT}/NAALG-.o ${OUT}/OCAMON.o \
  ${OUT}/PRQAGG.o ${OUT}/QUAGG.o ${OUT}/SKAGG.o \
  layer4done

```

— layerpic —

```

/* layer 4 */
/* depends on: BGAGG BRAGG GRMOD MODULE OAMON */

"ALGEBRA" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ALGEBRA"]
/*"ALGEBRA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ALGEBRA" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ALGEBRA" -> "LMODULE"*/
"ALGEBRA" -> "MODULE"
/*"ALGEBRA" -> {"BMODULE"; "RMODULE"; "COMRING"}*/

"ALGEBRA-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ALGEBRA"]
/*"ALGEBRA-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ALGEBRA-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ALGEBRA-" -> "LMODULE"*/
"ALGEBRA-" -> "MODULE"
/*"ALGEBRA-" -> {"BMODULE"; "RMODULE"; "COMRING"}*/

"BTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BTCAT"]
"BTCAT" -> "BRAGG"
/*"BTCAT" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"BTCAT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "NNI"; "INT"}*/

"BTCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BTCAT"]
"BTCAT-" -> "BRAGG"
/*"BTCAT-" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"BTCAT-" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "NNI"; "INT"}*/

"FMCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FMCAT"]
/*"FMCAT" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FMCAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"; "RETRACT"}*/
"FMCAT" -> "MODULE"

"IDPOAM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IDPOAM"]
"IDPOAM" -> "OAMON"
/*"IDPOAM" -> {"OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"}*/
/*"IDPOAM" -> {"ABELSG"; "IDPC"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/

"IFAMON" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IFAMON"]
/*"IFAMON" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"IFAMON" -> {"FAMONC"; "RETRACT"; "INT"; "LIST"; "ILIST"}*/
"IFAMON" -> "OAMON"
/*"IFAMON" -> {"OASGP"; "ORDSET"}*/

"GRALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=GRALG"]
"GRALG" -> "GRMOD"
/*"GRALG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"; "COMRING"; "RING"}*/
/*"GRALG" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"GRALG" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/

"GRALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GRALG"]
"GRALG-" -> "GRMOD"

```

```

/*"GRALG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"; "COMRING"; "RING"}*/
/*"GRALG-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"GRALG-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/

"NAALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=NAALG"]
/*"NAALG" -> {"NARNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NAALG" -> {"BASTYPE"; "KOERCE"; "MONAD"}*/
"NAALG" -> "MODULE"
/*"NAALG" -> {"BMODULE"; "LMODULE"; "RMODULE"; "COMRING"; "RING"; "RNG"}*/
/*"NAALG" -> {"SGROUP"; "MONOID"; "PI"; "NNI"; "INT"}*/

"NAALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NAALG"]
/*"NAALG-" -> {"NARNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"NAALG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"}*/
"NAALG-" -> "MODULE"
/*"NAALG-" -> {"BMODULE"; "LMODULE"; "RMODULE"; "COMRING"; "RING"; "RNG"}*/
/*"NAALG-" -> {"SGROUP"; "MONOID"; "PI"; "NNI"; "INT"}*/

"OCAMON" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OCAMON"]
"OCAMON" -> "OAMON"
/*"OCAMON" -> {"OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"OCAMON" -> {"ABELMON"; "ABELSG"; "CABMON"}*/

"PRQAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PRQAGG"]
"PRQAGG" -> "BGAGG"
/*"PRQAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PRQAGG" -> {"EVALAB"; "IEVALAB"}*/

"QUAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=QUAGG"]
"QUAGG" -> "BGAGG"
/*"QUAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"QUAGG" -> {"EVALAB"; "IEVALAB"}*/

"SKAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SKAGG"]
"SKAGG" -> "BGAGG"
/*"SKAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SKAGG" -> {"EVALAB"; "IEVALAB"}*/

```

1.4.7 Layer 5

Depends on: ALGEBRA ALGEBRA- BTCAT OCAMON QUAGG SKAGG

Used by next layer: MLO OAGROUP OAMONS PID XALG

— layer5 —

```

LAYER5=\
  ${OUT}/BSTREE.o  ${OUT}/BTURN.o  ${OUT}/CARD.o  ${OUT}/DRAWHACK.o \
  ${OUT}/DQAGG.o  ${OUT}/FACTFUNC.o  ${OUT}/FMTC.o  ${OUT}/FR2.o \
  ${OUT}/FRAC2.o  ${OUT}/FRUTIL.o  ${OUT}/ITAYLOR.o  ${OUT}/MLO.o \

```



```

${OUT}/NEWTON.o  ${OUT}/OAGROUP.o  ${OUT}/OAMONS.o  ${OUT}/OP.o      \
${OUT}/PID.o     ${OUT}/RANDSRC.o  ${OUT}/UNISEG2.o  ${OUT}/XALG.o      \
layer5done

-----

— layerpic —

/* layer 5 */
/* depends on: ALGEBRA ALGEBRA- BTCAT OCAMON QUAGG SKAGG */

"BSTREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BSTREE"]
"BSTREE" -> "BTCAT"
/*"BSTREE" -> {"BRAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"BSTREE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ORDSET"}*/
/*"BSTREE" -> {"INT"; "LIST"; "ILIST"}*/

"BTOURN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BTOURN"]
"BTOURN" -> "BTCAT"
/*"BTOURN" -> {"BRAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"BTOURN" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ORDSET"}*/
/*"BTOURN" -> {"INT"; "LIST"; "ILIST"}*/

"CARD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CARD"]
/*"CARD" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"}*/
/*"CARD" -> {"MONOID"; "SGROUP"; "RETRACT"; "BOOLEAN"; "INT"; "NNI"; "INS-"}*/
/*"CARD" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
"CARD" -> "ALGEBRA-"
/*"CARD" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/

"DRAWHACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DRAWHACK"]
/*"DRAWHACK" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"DRAWHACK" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"DRAWHACK" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"DRAWHACK" -> "RMODULE"*/
"DRAWHACK" -> "ALGEBRA"
/*"DRAWHACK" -> {"MODULE"; "ENTIRER"; "KONVERT"}*/

"DQAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DQAGG"]
"DQAGG" -> "SKAGG"
/*"DQAGG" -> {"BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DQAGG" -> {"KOERCE"; "EVALAB"; "IEVALAB"}*/
"DQAGG" -> "QUAGG"

"FACTFUNC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FACTFUNC"]
/*"FACTFUNC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FACTFUNC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FACTFUNC" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"FACTFUNC" -> "ALGEBRA"
/*"FACTFUNC" -> {"MODULE"; "ENTIRER"; "INT"; "LIST"; "ILIST"; "INS-"}*/
/*"FACTFUNC" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"FACTFUNC" -> "ELAGG-"/>

```

```

"FMTC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FMTC"]
/*"FMTC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FMTC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FMTC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"FMTC" -> "ALGEBRA"
/*"FMTC" -> {"MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"}*/

"FR2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FR2"]
/*"FR2" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FR2" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FR2" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"FR2" -> "ALGEBRA"
/*"FR2" -> {"MODULE"; "ENTIRER"}*/

"FRAC2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FRAC2"]
/*"FRAC2" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FRAC2" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FRAC2" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"FRAC2" -> "ALGEBRA"
/*"FRAC2" -> {"MODULE"; "ENTIRER"}*/

"FRUTIL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FRUTIL"]
/*"FRUTIL" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FRUTIL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FRUTIL" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"FRUTIL" -> "ALGEBRA"
/*"FRUTIL" -> {"MODULE"; "ENTIRER"; "INT"; "LIST"; "ILIST"; "PI"; "NNI"}*/
/*"FRUTIL" -> {"LSAGG-"; "STAGG-"}*/

"ITAYLOR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ITAYLOR"]
/*"ITAYLOR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ITAYLOR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ITAYLOR" -> {"LMODULE"; "INTDOM"; "COMRING"; "BMODULE"; "RMODULE"}*/
"ITAYLOR" -> "ALGEBRA"
/*"ITAYLOR" -> {"MODULE"; "ENTIRER"; "SINT"; "NNI"; "INT"; "BOOLEAN"}*/

"MLO" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MLO"]
/*"MLO" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MLO" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MLO" -> {"BMODULE"; "RMODULE"}*/
"MLO" -> "ALGEBRA"
/*"MLO" -> "MODULE"*/

"NEWTON" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NEWTON"]
/*"NEWTON" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"NEWTON" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NEWTON" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"NEWTON" -> "ALGEBRA"
/*"NEWTON" -> {"MODULE"; "ENTIRER"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"NEWTON" -> {"LSAGG-"; "STAGG-"}*/

/* The PID/OAGROUP node is added to the graph to simplify the layout*/
/* Note that PID and OAGROUP also exist */
"PID/OAGROUP" [color="blue",href="bookvol10.2.pdf#nameddest=OAGROUP"]

```

```

"PID/OAGROUP" -> "OCAMON"
"PID/OAGROUP" -> "ALGEBRA"

"OAGROUP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OAGROUP"]
"OAGROUP" -> "OCAMON"
/*"OAGROUP" -> {"OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"OAGROUP" -> {"ABELMON"; "ABELSG"; "CABMON"; "ABELGRP"}*/

"PID" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PID"]
/*"PID" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PID" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PID" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"PID" -> "ALGEBRA"
/*"PID" -> {"MODULE"; "ENTIRER"}*/

"OAMONS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OAMONS"]
"OAMONS" -> "OCAMON"
/*"OAMONS" -> {"OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"OAMONS" -> {"ABELMON"; "ABELSG"; "CABMON"}*/

"OP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OP"]
/*"OP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"OP" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "RETRACT"}*/
/*"OP" -> {"ELTAB"; "CHARZ"; "CHARNZ"}*/
"OP" -> "ALGEBRA"
/*"OP" -> {"MODULE"; "BMODULE"; "RMODULE"; "COMRING"; "ORDSET"}*/

"RANDSRC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RANDSRC"]
/*"RANDSRC" -> {"INT"; "PI"; "NNI"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"RANDSRC" -> "INTDOM-"/
"RANDSRC" -> "ALGEBRA-"
/*"RANDSRC" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"RANDSRC" -> "ABELMON-"/

"UNISEG2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UNISEG2"]
/*"UNISEG2" -> {"TYPE"; "ORDRING"; "OAGROUP"}*/
"UNISEG2" -> "OCAMON"
/*"UNISEG2" -> {"OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UNISEG2" -> {"ABELMON"; "ABELSG"; "CABMON"; "ABELGRP"; "RING"; "RNG"}*/
/*"UNISEG2" -> {"SGROUP"; "MONOID"; "LMODULE"}*/

"XALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=XALG"]
/*"XALG" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"XALG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"XALG" -> {"BMODULE"; "RMODULE"}*/
"XALG" -> "ALGEBRA"
/*"XALG" -> "MODULE"*/

```

1.4.8 Layer6

Depends on: MLO OAGROUP OAMONS PID XALG

Used by next layer: AMR FIELD FIELD- FLAGG FLAGG- FRETRCT PADICCT RAD-
CAT XFALG

— layer6 —

```
LAYER6=\
  ${OUT}/AMR.o      ${OUT}/AMR-.o      ${OUT}/DEGRED.o  ${OUT}/DIVCAT.o  \
  ${OUT}/DLP.o      \
  ${OUT}/EAB.o      ${OUT}/ESTOOLS1.o  ${OUT}/FAGROUP.o  ${OUT}/FAMONOID.o \
  ${OUT}/FIELD.o    ${OUT}/FIELD-.o    ${OUT}/FLAGG.o    ${OUT}/FLAGG-.o  \
  ${OUT}/FLINEXP.o  ${OUT}/FLINEXP-.o  ${OUT}/FRETRCT.o  ${OUT}/FRETRCT-.o \
  ${OUT}/FSERIES.o  ${OUT}/FT.o        ${OUT}/IDPOAMS.o  ${OUT}/INFINITY.o \
  ${OUT}/LA.o       ${OUT}/MAPPKG4.o   ${OUT}/OMLO.o     ${OUT}/ORTHPOL.o  \
  ${OUT}/PRODUCT.o  ${OUT}/PADICCT.o   ${OUT}/PMPRED.o   ${OUT}/PMASS.o    \
  ${OUT}/PTFUNC2.o  ${OUT}/RADCAT.o   ${OUT}/RADCAT-.o  ${OUT}/RATRET.o   \
  ${OUT}/RADUTIL.o  ${OUT}/UPXS2.o    ${OUT}/XFALG.o    ${OUT}/ZLINDEP.o \
layer6done
```

— layerpic —

```
/* layer 6 */
/* MLO OAGROUP OAMONS PID XALG */

"AMR" [color="#4488FF",href="bookvol10.2.pdf#nameddest=AMR"]
/*"AMR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"AMR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"AMR" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"AMR" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"AMR" -> {"INS"; "UFD"; "GCDDOM"; "EUCDOM"}*/
"AMR" -> "PID/OAGROUP"
/*"AMR" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "DIFRING"}*/
/*"AMR" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"AMR" -> "STEP"*/

"AMR-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AMR"]
/*"AMR-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"AMR-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"AMR-" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"AMR-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"AMR-" -> {"INS"; "UFD"; "GCDDOM"; "EUCDOM"}*/
"AMR-" -> "PID/OAGROUP"
/*"AMR-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "DIFRING"}*/
/*"AMR-" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"AMR-" -> "STEP"*/

"DEGRED" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DEGRED"]
/*"DEGRED" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DEGRED" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DEGRED" -> {"INTDOM"; "COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
```

```

/*"DEGRED" -> {"MODULE"; "ENTIRER"; "ORDSET"; "BOOLEAN"; "INT"; "LIST"}*/
/*"DEGRED" -> {"ILIST"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"DEGRED" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"DEGRED" -> {"ABELGRP-"; "ABELMON-"; "PI"; "NNI"; "INS"; "UFD"; "GCDDOM"}*/
/*"DEGRED" -> "EUCDOM"*/
"DEGRED" -> "PID/OAGROUP"
/*"DEGRED" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"DEGRED" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"DEGRED" -> {"REAL"; "CHARZ"; "STEP"; "SINT"}*/

"DIVCAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DIVCAT"]
/*"DIVCAT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"DIVCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"DIVCAT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DIVCAT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "OINTDOM"}*/
/*"DIVCAT" -> {"ORDRING"}*/
"DIVCAT" -> "PID"
"DIVCAT" -> "OAGROUP"
/*"DIVCAT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"DIVCAT" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"DIVCAT" -> {"STEP"; "FAMONC"}*/

"DLP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DLP"]
/*"DLP" -> {"MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"; "KOERCE"; "FINITE"}*/
/*"DLP" -> {"INT"; "NNI"; "BOOLEAN"; "SINT"; "PI"; "ABELSG"}*/
"DLP" -> "OAMONS"
/*"DLP" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "ABELMON"; "CABMON"}*/

"EAB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EAB"]
/*"EAB" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INS"; "UFD"}*/
/*"EAB" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"EAB" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"EAB" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"EAB" -> "PID/OAGROUP"
/*"EAB" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"EAB" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"EAB" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "INT"; "LIST"; "ILIST"}*/
/*"EAB" -> {"BOOLEAN"; "NNI"; "SINT"}*/

"ESTOOLS1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ESTOOLS1"]
/*"ESTOOLS1" -> "ORDRING"*/
"ESTOOLS1" -> "OAGROUP"
/*"ESTOOLS1" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"ESTOOLS1" -> {"KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "ABELGRP"}*/
/*"ESTOOLS1" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"}*/

"FAGROUP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FAGROUP"]
/*"FAGROUP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FAGROUP" -> {"BASTYPE"; "KOERCE"; "MODULE"; "BMODULE"; "LMODULE"}*/
/*"FAGROUP" -> {"RMODULE"; "FAMONC"; "RETRACT"; "ORDSET"; "INS"; "UFD"}*/
/*"FAGROUP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "SGROUP"}*/
/*"FAGROUP" -> {"MONOID"; "ALGEBRA"; "ENTIRER"; "EUCDOM"}*/
"FAGROUP" -> "PID/OAGROUP"
/*"FAGROUP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/

```

```

/*"FAGROUP" -> {"DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"FAGROUP" -> {"CHARZ"; "STEP"; "INT"; "LIST"; "ILIST"; "BOOLEAN"; "OM"}*/

"FAMONOID" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FAMONOID"]
/*"FAMONOID" -> {"FAMONC"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FAMONOID" -> {"BASTYPE"; "KOERCE"; "RETRACT"}*/
"FAMONOID" -> "OAMONS"
/*"FAMONOID" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "NNI"; "INT"}*/
/*"FAMONOID" -> {"MONOID"; "SGROUP"}*/

"FIELD" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FIELD"]
/*"FIELD" -> "EUCDOM"*/
"FIELD" -> "PID"
/*"FIELD" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"FIELD" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FIELD" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FIELD" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"FIELD" -> {"BOOLEAN"; "INT"; "NNI"}*/

"FIELD-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FIELD"]
/*"FIELD-" -> "EUCDOM"*/
"FIELD-" -> "PID"
/*"FIELD-" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"FIELD-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FIELD-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FIELD-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "BOOLEAN"}*/
/*"FIELD-" -> {"INT"; "NNI"}*/

"FLAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FLAGG"]
/*"FLAGG" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"FLAGG" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"FLAGG" -> {"KONVERT"; "ORDSET"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"FLAGG" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FLAGG" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FLAGG" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"FLAGG" -> "PID/OAGROUP"
/*"FLAGG" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FLAGG" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"FLAGG" -> {"CHARZ"; "STEP"; "OM"}*/

"FLAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FLAGG"]
/*"FLAGG-" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"FLAGG-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FLAGG-" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INS"; "UFD"}*/
/*"FLAGG-" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"FLAGG-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"FLAGG-" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FLAGG-" -> {"ENTIRER"; "EUCDOM"}*/
"FLAGG-" -> "PID/OAGROUP"
/*"FLAGG-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FLAGG-" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"FLAGG-" -> {"CHARZ"; "STEP"; "OM"}*/

"FLINEXP" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FLINEXP"]

```

```

/*"FLINEXP" -> {"LINEXP"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FLINEXP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FLINEXP" -> {"LMODULE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FLINEXP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FLINEXP" -> "EUCDOM"*/
"FLINEXP" -> "PID/OAGROUP"
/*"FLINEXP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FLINEXP" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "PATMAB"}*/
/*"FLINEXP" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"FLINEXP-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FLINEXP"]
/*"FLINEXP-" -> {"LINEXP"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FLINEXP-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FLINEXP-" -> {"MONOID"; "LMODULE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"FLINEXP-" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FLINEXP-" -> {"ENTIRER"; "EUCDOM"}*/
"FLINEXP-" -> "PID/OAGROUP"
/*"FLINEXP-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FLINEXP-" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"FLINEXP-" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"FRETRCT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FRETRCT"]
/*"FRETRCT" -> {"RETRACT"; "TYPE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"FRETRCT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FRETRCT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FRETRCT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FRETRCT" -> {"ENTIRER"; "EUCDOM"}*/
"FRETRCT" -> "PID/OAGROUP"
/*"FRETRCT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FRETRCT" -> {"ORDSET"; "DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"FRETRCT" -> {"REAL"; "CHARZ"; "STEP"}*/

"FRETRCT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FRETRCT"]
/*"FRETRCT-" -> {"RETRACT"; "TYPE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"FRETRCT-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FRETRCT-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FRETRCT-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FRETRCT-" -> {"MODULE"; "ENTIRER"; "EUCDOM"}*/
"FRETRCT-" -> "PID/OAGROUP"
/*"FRETRCT-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FRETRCT-" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "LINEXP"}*/
/*"FRETRCT-" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"FSERIES" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FSERIES"]
/*"FSERIES" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FSERIES" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FSERIES" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"FSERIES" -> {"ORDSET"; "PI"; "NNI"; "INT"; "INS"; "UFD"; "GCDDOM"}*/
/*"FSERIES" -> {"INTDOM"; "ENTIRER"; "EUCDOM"}*/
"FSERIES" -> "PID/OAGROUP"
/*"FSERIES" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FSERIES" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"FSERIES" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "LIST"}*/

```

```

"FT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FT"]
/*"FT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INS"; "UFD"; "GCDDOM"}*/
/*"FT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FT" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"FT" -> "PID/OAGROUP"
/*"FT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FT" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"FT" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "INT"; "LIST"; "ILIST"}*/
/*"FT" -> "BOOLEAN"*/

"IDPOAMS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IDPOAMS"]
"IDPOAMS" -> "OAMONS"
/*"IDPOAMS" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"IDPOAMS" -> {"KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "IDPC"; "INT"}*/
/*"IDPOAMS" -> {"LIST"; "ILIST"}*/

"INFINITY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INFINITY"]
/*"INFINITY" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"INFINITY" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"INFINITY" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INFINITY" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"INFINITY" -> "EUCDOM"*/
"INFINITY" -> "PID/OAGROUP"
/*"INFINITY" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"INFINITY" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"INFINITY" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

/* Note that INS has a circular self reference */
"INS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=INS",
      shape=ellipse]
/*"INS" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"INS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"INS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"INS" -> "PID/OAGROUP"
/*"INS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"INS" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"INS" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "NNI"; "INT"}*/
/*"INS" -> {"BOOLEAN"; "DFLOAT"}*/

"INS-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INS",
       shape=ellipse]
/*"INS-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"INS-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"INS-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INS-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"INS-" -> "PID/OAGROUP"
/*"INS-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"INS-" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"INS-" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "NNI"; "INT"}*/
/*"INS-" -> {"BOOLEAN"; "DFLOAT"}*/

"LA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LA"]

```



```

/*"LA" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LA" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LA" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "ORDRING"}*/
"LA" -> "OAGROUP"
/*"LA" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "COMRING"}*/

"LNAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LNAGG",
        shape=ellipse]
/*"LNAGG" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"LNAGG" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LNAGG" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"LNAGG" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"LNAGG" -> "PID/OAGROUP"
/*"LNAGG" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"LNAGG" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"LNAGG" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "IXAGG"; "HOAGG"}*/
/*"LNAGG" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"LNAGG" -> {"CLAGG"; "OM"; "INT"; "BOOLEAN"; "NNI"}*/

"LNAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LNAGG",
        shape=ellipse]
/*"LNAGG-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"LNAGG-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LNAGG-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"LNAGG-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"LNAGG-" -> "PID/OAGROUP"
/*"LNAGG-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"LNAGG-" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"LNAGG-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"LNAGG-" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"LNAGG-" -> {"OM"; "INT"; "BOOLEAN"; "NNI"}*/

"MAPPKG4" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAPPKG4"]
/*"MAPPKG4" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"MAPPKG4" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MAPPKG4" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"MAPPKG4" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"MAPPKG4" -> "PID/OAGROUP"
/*"MAPPKG4" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"MAPPKG4" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"MAPPKG4" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"NNI" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NNI",
      shape=ellipse]
"NNI" -> "OAMONS"
/*"NNI" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"NNI" -> {"KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "MONOID"; "SGROUP"}*/
/*"NNI" -> {"NNI"; "INT"; "BOOLEAN"}*/

"OINTDOM" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OINTDOM",
          shape=ellipse]
/*"OINTDOM" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"OINTDOM" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"OINTDOM" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/

```

```

/*"OINTDOM" -> {"MODULE"; "ENTIRER"; "ORDRING"}*/
"OINTDOM" -> "OAGROUP"
/*"OINTDOM" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/

"OMLO" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OMLO"]
"OMLO" -> "MLO"
/*"OMLO" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"OMLO" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"OMLO" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "DIFRING"; "COMRING"}*/

"ORDRING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ORDRING",
           shape=ellipse]
"ORDRING" -> "OAGROUP"
/*"ORDRING" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"ORDRING" -> {"KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "ABELGRP"}*/
/*"ORDRING" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"; "INT"}*/

"ORDRING-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ORDRING-",
            shape=ellipse]
"ORDRING-" -> "OAGROUP"
/*"ORDRING-" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"ORDRING-" -> {"KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "ABELGRP"; "RING"}*/
/*"ORDRING-" -> {"RNG"; "SGROUP"; "MONOID"; "LMODULE"; "INT"}*/

"ORTHPOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ORTHPOL"]
/*"ORTHPOL" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ORTHPOL" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ORTHPOL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "NNI"; "INT"; "SINT"}*/
/*"ORTHPOL" -> {"MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"; "PI"; "INS-"}*/
/*"ORTHPOL" -> {"ALGEBRA"; "MODULE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"ORTHPOL" -> {"ENTIRER"; "EUCDOM"}*/
"ORTHPOL" -> "PID/OAGROUP"
/*"ORTHPOL" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ORTHPOL" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"ORTHPOL" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"ORTHPOL" -> "STEP"*/

"PRODUCT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PRODUCT"]
/*"PRODUCT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "FINITE"; "MONOID"}*/
/*"PRODUCT" -> {"SGROUP"; "ABELMON"; "ABELSG"; "CABMON"; "GROUP"; {"ABELGRP"}*/
"PRODUCT" -> "OAMONS"
/*"PRODUCT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "BOOLEAN"; "NNI"}*/
/*"PRODUCT" -> "INT"*/

"PADICCT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PADICCT"]
/*"PADICCT" -> "EUCDOM"*/
"PADICCT" -> "PID"
/*"PADICCT" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PADICCT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PADICCT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PADICCT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/

"PMPRED" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMPRED"]
/*"PMPRED" -> {"TYPE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/

```

```

/*"PMPRED" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PMPRED" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PMPRED" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"PMPRED" -> "PID/OAGROUP"
/*"PMPRED" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PMPRED" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"PMPRED" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"PMASS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMASS"]
/*"PMASS" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PMASS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PMASS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PMASS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"PMASS" -> "PID/OAGROUP"
/*"PMASS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PMASS" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"PMASS" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"PTFUNC2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PTFUNC2"]
/*"PTFUNC2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PTFUNC2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PTFUNC2" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"PTFUNC2" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"PTFUNC2" -> "PID/OAGROUP"
/*"PTFUNC2" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PTFUNC2" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"PTFUNC2" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"RADCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RADCAT"]
/*"RADCAT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"RADCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RADCAT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"RADCAT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"RADCAT" -> "PID/OAGROUP"
/*"RADCAT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RADCAT" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"RADCAT" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"RADCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RADCAT"]
/*"RADCAT-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"RADCAT-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RADCAT-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RADCAT-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"RADCAT-" -> "EUCDOM"*/
"RADCAT-" -> "PID/OAGROUP"
/*"RADCAT-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"RADCAT-" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"RADCAT-" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"RATRET" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RATRET"]
/*"RATRET" -> {"RETRACT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"RATRET" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RATRET" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RATRET" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/

```

```

/*"RATRET" -> "EUCDOM"*/
"RATRET" -> "PID/OAGROUP"
/*"RATRET" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RATRET" -> {"ORDSET"; "DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"RATRET" -> {"REAL"; "CHARZ"; "STEP"}*/

"RADUTIL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RADUTIL"]
/*"RADUTIL" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"RADUTIL" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RADUTIL" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RADUTIL" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"RADUTIL" -> "EUCDOM"*/
"RADUTIL" -> "PID/OAGROUP"
/*"RADUTIL" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RADUTIL" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"RADUTIL" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

/* Note that SINT references itself! */
"SINT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SINT",
        shape=ellipse]
/*"SINT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"SINT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SINT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SINT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"SINT" -> "PID/OAGROUP"
/*"SINT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SINT" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"SINT" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "LOGIC"; "OM"; "SINT"; "INT"}*/

"STAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=STAGG",
        shape=ellipse]
/*"STAGG" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"STAGG" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"STAGG" -> {"ELTAB"; "CLAGG"; "KONVERT"; "BOOLEAN"; "SINT"; "NNI"; "INT"}*/
/*"STAGG" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"STAGG" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"STAGG" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"STAGG" -> {"ENTIRER"; "EUCDOM"}*/
"STAGG" -> "PID/OAGROUP"
/*"STAGG" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"STAGG" -> {"ORDSET"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"STAGG" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "LIST"; "ILIST"}*/

"STAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=STAGG",
        shape=ellipse]
/*"STAGG-" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"STAGG-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"STAGG-" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "BOOLEAN"; "SINT"}*/
/*"STAGG-" -> {"NNI"; "INT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"STAGG-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"STAGG-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"STAGG-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"STAGG-" -> "PID/OAGROUP"
/*"STAGG-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/

```

```

/*"STAGG-" -> {"ORDSET"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"STAGG-" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "LIST"; "ILIST"}*/

"UPXS2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPXS2"]
/*"UPXS2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPXS2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UPXS2" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"UPXS2" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
"UPXS2" -> "PID/OAGROUP"
/*"UPXS2" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"UPXS2" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"UPXS2" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"XFALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=XFALG"]
/*"XFALG" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"XFALG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"XFALG" -> "XALG"
/*"XFALG" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "RETRACT"}*/

"ZLINDEP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ZLINDEP"]
/*"ZLINDEP" -> {"LINEXP"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ZLINDEP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ZLINDEP" -> {"MONOID"; "LMODULE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"ZLINDEP" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ZLINDEP" -> {"ENTIRER"; "EUCDOM"}*/
"ZLINDEP" -> "PID/OAGROUP"
/*"ZLINDEP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ZLINDEP" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"ZLINDEP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

```

1.4.9 Layer7

Depends on: AMR FIELD FIELD- FLAGG FLAGG- FRETRCT PADICCT RADCAT XFALG

Used by next layer: A1AGG A1AGG- ARR2CAT FAMR FPC LIECAT LZSTAGG OREP- CAT PSCAT TRANFUN VSPACE XPOLYC

— layer7 —

```

LAYER7=\
  ${OUT}/A1AGG.o      ${OUT}/A1AGG-.o    ${OUT}/ARR2CAT.o    ${OUT}/ARR2CAT-.o \
  ${OUT}/ASP34.o      ${OUT}/BBTREE.o     ${OUT}/BFUNCT.o     ${OUT}/BLAS1.o     \
  ${OUT}/BPADIC.o     \
  ${OUT}/BTREE.o      ${OUT}/CRAPACK.o    ${OUT}/DEQUEUE.o    ${OUT}/DIRRING.o   \
  ${OUT}/DIV.o        ${OUT}/DLIST.o      \
  ${OUT}/DRAWCX.o     ${OUT}/DRAWPT.o    ${OUT}/D01GBFA.o    ${OUT}/D02EJFA.o   \
  ${OUT}/D03FAFA.o    ${OUT}/FAMR.o      ${OUT}/FAMR-.o      ${OUT}/FIELD.o     \
  ${OUT}/FLASORT.o    \
  ${OUT}/FLAGG2.o     ${OUT}/FGROUP.o    ${OUT}/FM.o         ${OUT}/FM1.o       \
  ${OUT}/FPC.o        ${OUT}/FPC-.o      ${OUT}/FMONOID.o    ${OUT}/INDE.o      \
  ${OUT}/IPADIC.o     ${OUT}/IROOT.o     ${OUT}/IR2.o        ${OUT}/LEXP.o      \

```

```

${OUT}/LIECAT.o    ${OUT}/LIECAT-.o  ${OUT}/LIST2.o    ${OUT}/LIST2MAP.o \
${OUT}/LMOPS.o     ${OUT}/LZSTAGG.o  ${OUT}/LZSTAGG-.o ${OUT}/MAGMA.o  \
${OUT}/MESH.o      ${OUT}/MOEBIUS.o  ${OUT}/MODFIELD.o ${OUT}/MODOP.o    \
${OUT}/MRING.o     ${OUT}/MTHING.o   ${OUT}/NCNTFRAC.o ${OUT}/NCODIV.o   \
${OUT}/NUMTUBE.o   ${OUT}/ODR.o       ${OUT}/OFMONOID.o ${OUT}/ONECOMP.o  \
${OUT}/ORDCOMP.o   ${OUT}/OREPCAT.o   ${OUT}/OREPCAT-.o ${OUT}/OWP.o      \
${OUT}/PACPERC.o   \
${OUT}/PADIC.o     ${OUT}/PATTERN2.o ${OUT}/PATLRES.o  ${OUT}/PARTPERM.o \
${OUT}/PBWL.B.o    ${OUT}/PENDTREE.o ${OUT}/PGE.o       ${OUT}/PGROEB.o    \
${OUT}/PINTERP.o   ${OUT}/PLOTTOOL.o ${OUT}/PFR.o       ${OUT}/PMDOWN.o    \
${OUT}/PMINS.o     ${OUT}/PMLSAGG.o   ${OUT}/PMTTOOLS.o  ${OUT}/PRITION.o  \
${OUT}/PSCAT.o     ${OUT}/PSCAT-.o    ${OUT}/QFORM.o     ${OUT}/QUEUE.o     \
${OUT}/SCACHE.o    ${OUT}/SEG.o       ${OUT}/SEG2.o      ${OUT}/SEXOF.o     \
${OUT}/STACK.o     ${OUT}/STTAYLOR.o  ${OUT}/TABLBUMP.o  ${OUT}/TABLEAU.o  \
${OUT}/TOPSP.o     ${OUT}/TRANFUN.o   ${OUT}/TRANFUN-.o ${OUT}/TUBE.o      \
${OUT}/UDPO.o      ${OUT}/UNISEG.o    ${OUT}/VIEW.o      ${OUT}/VSPACE.o    \
${OUT}/VSPACE-.o   ${OUT}/XPOLYC.o    ${OUT}/XPR.o \
layer7done

```

— layerpic —

```

/* layer 7 */
/* depends on: AMR FIELD FIELD- FLAGG FLAGG- FRETRCT PADICCT RADCAT XFALG */

"A1AGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=A1AGG"]
"A1AGG" -> "FLAGG"
/*"A1AGG" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"A1AGG" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"A1AGG" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INS"; "UFD"; "GCDDOM"}*/
/*"A1AGG" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"A1AGG" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"A1AGG" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"A1AGG" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"A1AGG" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"A1AGG" -> {"CHARZ"; "STEP"; "OM"; "BOOLEAN"; "SINT"; "INT"}*/
/*"A1AGG" -> {"NNI"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"A1AGG" -> {"RCAGG"; "ELAGG"}*/

"A1AGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=A1AGG"]
"A1AGG-" -> "FLAGG"
/*"A1AGG-" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"A1AGG-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"A1AGG-" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INS"; "UFD"; "GCDDOM"}*/
/*"A1AGG-" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"A1AGG-" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"A1AGG-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"A1AGG-" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"A1AGG-" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"A1AGG-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/
/*"A1AGG-" -> {"BOOLEAN"; "SINT"; "INT"; "NNI"; "LIST"; "ILIST"}*/
/*"A1AGG-" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/

```

```

"ARR2CAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ARR2CAT"]
/*"ARR2CAT" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ARR2CAT" -> {"EVALAB"; "IEVALAB"}*/
"ARR2CAT" -> "FLAGG"
/*"ARR2CAT" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"ARR2CAT" -> {"ORDSET"; "BOOLEAN"; "NNI"; "INT"; "SINT"; "LIST"}*/
/*"ARR2CAT" -> {"ILIST"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ARR2CAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ARR2CAT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ARR2CAT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"ARR2CAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"ARR2CAT" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"ARR2CAT" -> {"CHARZ"; "STEP"; "OM"}*/

"ARR2CAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ARR2CAT"]
/*"ARR2CAT-" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ARR2CAT-" -> {"EVALAB"; "IEVALAB"}*/
"ARR2CAT-" -> "FLAGG"
/*"ARR2CAT-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"ARR2CAT-" -> {"ORDSET"; "BOOLEAN"; "NNI"; "INT"; "SINT"; "LIST"; "ILIST"}*/
/*"ARR2CAT-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"ARR2CAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"ARR2CAT-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ARR2CAT-" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"ARR2CAT-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ARR2CAT-" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"ARR2CAT-" -> {"REAL"; "CHARZ"; "STEP"; "OM"}*/

"ASP34" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP34"]
/*"ASP34" -> {"FMC"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "INS"; "UFD"}*/
/*"ASP34" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ASP34" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"}*/
/*"ASP34" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ASP34" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"ASP34" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"ASP34" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"ASP34" -> {"STEP"; "FPS"; "RNS"}*/
"ASP34" -> "FIELD"
/*"ASP34" -> "DIVRING"*/
"ASP34" -> "RADCAT"
/*"ASP34" -> {"NNI"; "INT"; "OM"}*/

"BBTREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BBTREE"]
/*"BBTREE" -> {"BTCAT"; "BRAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"BBTREE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "BOOLEAN"}*/
/*"BBTREE" -> {"LSAGG"; "STAGG"; "URAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"BBTREE" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"BBTREE" -> "FLAGG"
/*"BBTREE" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"BBTREE" -> {"SINT"; "PI"; "LSAGG-"; "STAGG-"}*/

"BFUNCT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BFUNCT"]
/*"BFUNCT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDSET"; "DFLOAT"; "FPS-"}*/

```

```

/*"BFUNCT" -> "RNS-"/
"BFUNCT" -> "FIELD-"
/*"BFUNCT" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"; "INTDOM-"}*/
/*"BFUNCT" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "INT"}*/

"BLAS1" [color="#444488",href="bookvol10.5.pdf#nameddest=BLAS1"]
/*"BLAS1" -> {"FPS" "RNS"}*/
"BLAS1" -> "FIELD"
/*"BLAS1" -> {"EUCDOM" "PID" "GCDDOM" "INTDOM" "COMRING" "RING" "RNG"}*/
/*"BLAS1" -> {"ABELGRP" "CABMON" "ABELMON" "ABELSG" "SETCAT" "BASTYPE"}*/
/*"BLAS1" -> {"KOERCE" "SGROUP" "MONOID" "LMODULE" "BMODULE" "RMODULE"}*/
/*"BLAS1" -> {"ALGEBRA" "MODULE" "ENTIRER" "UFD" "DIVRING" "ORDRING"}*/
/*"BLAS1" -> {"OAGROUP" "OCAMON" "OASGP" "ORDSET" "REAL"}*/
/*"BLAS1" -> {"KONVERT" "RETRACT"}*/
"BLAS1" -> "RADCAT"
/*"BLAS1" -> {"PATMAB" "CHARZ"}*/

"BPADIC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BPADIC"]
/*"BPADIC" -> "BOOLEAN"/
"BPADIC" -> "PADICCT"
/*"BPADIC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"BPADIC" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"BPADIC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"BPADIC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "INS"}*/
/*"BPADIC" -> {"UFD"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"BPADIC" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"BPADIC" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"}*/

"BTREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BTREE"]
/*"BTREE" -> {"BTCAT"; "BRAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"BTREE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "INT"; "LIST"}*/
/*"BTREE" -> {"ILIST"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "LNAGG"}*/
/*"BTREE" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"BTREE" -> "FLAGG"
/*"BTREE" -> {"ORDSET"; "ELAGG"; "OM"}*/

"CLAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=CLAGG",
        shape=ellipse]
/*"CLAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"CLAGG" -> {"EVALAB"; "IEVALAB"; "KONVERT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"CLAGG" -> {"RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
"CLAGG" -> "FLAGG"
/*"CLAGG" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"CLAGG" -> {"BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/

"CLAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CLAGG",
        shape=ellipse]
/*"CLAGG-" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"CLAGG-" -> {"EVALAB"; "IEVALAB"; "KONVERT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"CLAGG-" -> {"RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
"CLAGG-" -> "FLAGG"
/*"CLAGG-" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"CLAGG-" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "ELAGG"}*/

```



```

"CRAPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CRAPACK"]
/*"CRAPACK" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"CRAPACK" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"CRAPACK" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CRAPACK" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"CRAPACK" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"CRAPACK" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"CRAPACK" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"CRAPACK" -> "FLAGG"
/*"CRAPACK" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/

"DEQUEUE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DEQUEUE"]
/*"DEQUEUE" -> {"DQAGG"; "SKAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"DEQUEUE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "QUAGG"; "INT"}*/
/*"DEQUEUE" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"DEQUEUE" -> "FLAGG-"
/*"DEQUEUE" -> {"URAGG-"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"DEQUEUE" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DEQUEUE" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DEQUEUE" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDDOM"; "PID"; "OINTDOM"}*/
/*"DEQUEUE" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"DEQUEUE" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"DEQUEUE" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "LNAGG-"; "LSAGG"; "STAGG"}*/
/*"DEQUEUE" -> {"URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"DEQUEUE" -> "CLAGG"*/
"DEQUEUE" -> "FLAGG"
/*"DEQUEUE" -> "ELAGG"*/

"DIRRING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIRRING"]
"DIRRING" -> "FLAGG"
/*"DIRRING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DIRRING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DIRRING" -> {"ELTAB"; "INTDOM"; "COMRING"; "BMODULE"; "RMODULE"}*/
/*"DIRRING" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "INT"; "INS"; "UFD"}*/
/*"DIRRING" -> {"GCDDOM"; "EUCDDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"DIRRING" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"DIRRING" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"DIRRING" -> {"STEP"; "PI"; "NNI"; "BOOLEAN"; "LIST"; "ILIST"; "INS-"}*/
/*"DIRRING" -> {"MONOID-"; "ABELSG-"; "SGROUP-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"DIRRING" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"DIRRING" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "ELAGG"; "OM"; "LSAGG-"}*/

"DIV" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIV"]
"DIV" -> "DIVCAT"
"DIV" -> "FLAGG"
/*"DIV" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"DIV" -> {"KOERCE"; "MODULE"; "BMODULE"; "LMODULE"; "RMODULE"; "FAMONC"}*/
/*"DIV" -> {"RETRACT"; "SETCATD"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"DIV" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"; "ALGEBRA"}*/
/*"DIV" -> {"ENTIRER"; "EUCDDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"DIV" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"DIV" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/
/*"DIV" -> {"INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"DIV" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/

```

```

/*"DIV" -> {"CLAGG"; "ELAGG"; "LIST"; "ILIST"; "LSAGG-"; "BOOLEAN"; "NNI"}*/
/*"DIV" -> {"STAGG-"; "ELAGG-"; "PI"}*/

"DLIST" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DLIST"]
/*"DLIST" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"DLIST" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"DLIST" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"DLIST" -> "FLAGG"
/*"DLIST" -> {"ORDSET"; "ELAGG"; "INT"; "LIST"; "ILIST"; "INS"; "UFD"}*/
/*"DLIST" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"DLIST" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DLIST" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"DLIST" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"DLIST" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"DLIST" -> {"REAL"; "CHARZ"; "STEP"; "OM"}*/

"DRAWCX" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DRAWCX"]
/*"DRAWCX" -> {"DFLOAT"; "PI"; "NNI"; "INT"; "FPS"; "RNS"}*/
"DRAWCX" -> "FIELD"
/*"DRAWCX" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DRAWCX" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DRAWCX" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"DRAWCX" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"DRAWCX" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"DRAWCX" -> {"REAL"; "KONVERT"; "RETRACT"}*/
"DRAWCX" -> "RADCAT"
/*"DRAWCX" -> {"PATMAB"; "CHARZ"; "SINT"; "LIST"; "ILIST"}*/

"D01GBFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01GBFA"]
/*"D01GBFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "DFLOAT"; "PI"}*/
/*"D01GBFA" -> {"NNI"; "INT"; "FPS"; "RNS"}*/
"D01GBFA" -> "FIELD"
/*"D01GBFA" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"D01GBFA" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"D01GBFA" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"D01GBFA" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"D01GBFA" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"D01GBFA" -> "RETRACT"*/
"D01GBFA" -> "RADCAT"
/*"D01GBFA" -> {"PATMAB"; "CHARZ"; "SINT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"D01GBFA" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"D01GBFA" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"D01GBFA" -> "FLAGG"
/*"D01GBFA" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"D01GBFA" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"D01GBFA" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"D01GBFA" -> "ABELMON-*/

"D02EJFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D02EJFA"]
/*"D02EJFA" -> {"ODECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
/*"D02EJFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"D02EJFA" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"D02EJFA" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"D02EJFA" -> "FLAGG"

```

```

/*"D02EJFA" -> {"ORDSET"; "ELAGG"; "OM"; "LIST"; "ILIST"; "DFLOAT"}*/
/*"D02EJFA" -> {"FPS-"; "RNS-"}*/
"D02EJFA" -> "FIELD-"
/*"D02EJFA" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"; "INTDOM-"}*/
/*"D02EJFA" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "FPS"; "RNS"}*/
"D02EJFA" -> "FIELD"
/*"D02EJFA" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"D02EJFA" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"D02EJFA" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"D02EJFA" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"D02EJFA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RETRACT"}*/
"D02EJFA" -> "RADCAT"
/*"D02EJFA" -> {"PATMAB"; "CHARZ"; "PI"}*/

"D03FAFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D03FAFA"]
/*"D03FAFA" -> {"PDECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "LSAGG"; "STAGG"}*/
/*"D03FAFA" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"D03FAFA" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"D03FAFA" -> "KONVERT"*/
"D03FAFA" -> "FLAGG"
/*"D03FAFA" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/

"DRAWPT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DRAWPT"]
/*"DRAWPT" -> {"FPS"; "RNS"}*/
"DRAWPT" -> "FIELD"
/*"DRAWPT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DRAWPT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DRAWPT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"DRAWPT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"DRAWPT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"DRAWPT" -> {"REAL"; "KONVERT"; "RETRACT"}*/
"DRAWPT" -> "RADCAT"
/*"DRAWPT" -> {"PATMAB"; "CHARZ"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"DRAWPT" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"DRAWPT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"DRAWPT" -> "FLAGG"
/*"DRAWPT" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "INS-"; "EUCDOM-"}*/
/*"DRAWPT" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"DRAWPT" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/
/*"DRAWPT" -> {"MONOID-"; "ORDSET-"; "ABELSG-"; "SGROUP-"; "SETCAT-"}*/
/*"DRAWPT" -> {"RETRACT-"; "BASTYPE-"; "DFLOAT"; "PI"; "NNI"; "SINT"}*/
/*"DRAWPT" -> {"LSAGG-"; "STAGG-"}*/

"EUCDOM" [color="#4488FF",href="bookvol10.2.pdf#nameddest=EUCDOM",
shape=ellipse]
/*"EUCDOM" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"EUCDOM" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"EUCDOM" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"EUCDOM" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"EUCDOM" -> {"BOOLEAN"; "NNI"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"EUCDOM" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LSAGG"; "STAGG"}*/
/*"EUCDOM" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"EUCDOM" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"EUCDOM" -> "KONVERT"*/

```

```

"EUCDOM" -> "FLAGG"
/*"EUCDOM" -> {"ORDSET"; "ELAGG"; "OM"}*/

"EUCDOM-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EUCDOM",
           shape=ellipse]
/*"EUCDOM-" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"EUCDOM-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"EUCDOM-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"EUCDOM-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"EUCDOM-" -> {"BOOLEAN"; "NNI"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"EUCDOM-" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LSAGG"; "STAGG"}*/
/*"EUCDOM-" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"EUCDOM-" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"EUCDOM-" -> "KONVERT"*/
"EUCDOM-" -> "FLAGG"
/*"EUCDOM-" -> {"ORDSET"; "ELAGG"; "OM"}*/

"FAMR" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FAMR"]
"FAMR" -> "AMR"
/*"FAMR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FAMR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FAMR" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"FAMR" -> {"CHARNZ"; "INTDOM"; "ENTIRER"}*/
"FAMR" -> "FRETRACT"
/*"FAMR" -> {"RETRACT"; "OAMON"; "OASGP"; "ORDSET"; "NNI"; "INT"; "LIST"}*/
/*"FAMR" -> {"ILIST"; "PI"; "BOOLEAN"}*/
"FAMR" -> "FIELD"
/*"FAMR" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/

"FAMR-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FAMR"]
"FAMR-" -> "AMR"
/*"FAMR-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FAMR-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FAMR-" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"FAMR-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"}*/
"FAMR-" -> "FRETRACT"
/*"FAMR-" -> {"RETRACT"; "OAMON"; "OASGP"; "ORDSET"; "NNI"; "INT"; "LIST"}*/
/*"FAMR-" -> {"ILIST"; "PI"; "BOOLEAN"}*/
"FAMR-" -> "FIELD"
/*"FAMR-" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/

"FLASORT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FLASORT"]
/*"FLASORT" -> "TYPE"*/
"FLASORT" -> "FLAGG"
/*"FLASORT" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "SETCAT"; "BASTYPE"}*/
/*"FLASORT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"FLASORT" -> {"KONVERT"; "ORDSET"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"FLASORT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FLASORT" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FLASORT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"FLASORT" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FLASORT" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"FLASORT" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "INT"; "INS-"; "EUCDOM-"}*/
/*"FLASORT" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/

```

```

/*"FLASORT" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/
/*"FLASORT" -> {"PI"; "NNI"; "SINT"; "BOOLEAN"}*/

"FLAGG2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FLAGG2"]
/*"FLAGG2" -> "TYPE"*/
"FLAGG2" -> "FLAGG"
/*"FLAGG2" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "SETCAT"; "BASTYPE"}*/
/*"FLAGG2" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"FLAGG2" -> {"KONVERT"; "ORDSET"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"FLAGG2" -> {"ELAGG"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FLAGG2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FLAGG2" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FLAGG2" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"FLAGG2" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"FLAGG2" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"FLAGG2" -> {"STEP"; "OM"; "INT"}*/

"FGROUP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FGROUP"]
/*"FGROUP" -> {"GROUP"; "MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FGROUP" -> {"RETRACT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FGROUP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FGROUP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FGROUP" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"FGROUP" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"FGROUP" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "INT"}*/
/*"FGROUP" -> {"LIST"; "ILIST"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"FGROUP" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"FGROUP" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"FGROUP" -> "FLAGG"
/*"FGROUP" -> {"ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"FGROUP" -> "FLAGG-"
/*"FGROUP" -> "URAGG-"}*/

"FM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FM"]
/*"FM" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"; "IDPC"; "MODULE"}*/
/*"FM" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "ORDSET"; "ENTIRER"; "INT"}*/
/*"FM" -> {"BOOLEAN"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"FM" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"FM" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"FM" -> "FLAGG"
/*"FM" -> {"ELAGG"; "OM"; "LSAGG-"}*/

"FMONOID" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FMONOID"]
/*"FMONOID" -> {"MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"FMONOID" -> {"ORDSET"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ABELMON"}*/
/*"FMONOID" -> {"ABELSG"; "CABMON"; "NNI"; "INT"; "LIST"; "ILIST"}*/
/*"FMONOID" -> {"LSAGG-"; "STAGG-"; "ELAGG-"}*/
"FMONOID" -> "FLAGG-"
/*"FMONOID" -> {"URAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"FMONOID" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"FMONOID" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"FMONOID" -> "FLAGG"
/*"FMONOID" -> {"ELAGG"; "OM"; "BOOLEAN"}*/

```

```

"FM1" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FM1"]
/*"FM1" -> {"FMCAT"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FM1" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"; "RETRACT"}*/
/*"FM1" -> {"MODULE"; "ORDSET"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"FM1" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"FM1" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"FM1" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"FM1" -> "FLAGG"
/*"FM1" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"; "BOOLEAN"}*/
/*"FM1" -> "LSAGG-"/

"FPC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FPC"]
"FPC" -> "FIELD"
/*"FPC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FPC" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FPC" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FPC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"FPC" -> {"INT"; "INS-"; "NNI"}*/

"FPC-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FPC"]
"FPC-" -> "FIELD"
/*"FPC-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FPC-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FPC-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FPC-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"FPC-" -> {"INT"; "INS-"; "NNI"}*/

"FPS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FPS",
      shape=ellipse]
/*"FPS" -> "RNS"*/
"FPS" -> "FIELD"
/*"FPS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FPS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FPS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FPS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"FPS" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"FPS" -> {"KONVERT"; "RETRACT"}*/
"FPS" -> "RADCAT"
/*"FPS" -> {"PATMAB"; "CHARZ"; "PI"; "NNI"; "INT"; "INS-"; "EUCDOM-"}*/
/*"FPS" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIVRING-"; "ORDRING-"}*/
/*"FPS" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"FPS-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FPS",
      shape=ellipse]
/*"FPS-" -> "RNS"*/
"FPS-" -> "FIELD"
/*"FPS-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"FPS-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FPS-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FPS-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"FPS-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"FPS-" -> {"REAL"; "KONVERT"; "RETRACT"}*/
"FPS-" -> "RADCAT"

```

```

/*"FPS-" -> {"PATMAB"; "CHARZ"; "PI"; "NNI"; "INT"; "INS-"; "EUCDOM-"}*/
/*"FPS-" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"FPS-" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"GCDDOM" [color="#4488FF",href="bookvol10.2.pdf#nameddest=GCDDOM",
        shape=ellipse]
/*"GCDDOM" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"GCDDOM" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GCDDOM" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"GCDDOM" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"GCDDOM" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"GCDDOM" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"GCDDOM" -> "FLAGG"
/*"GCDDOM" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"GCDDOM" -> "NNI"*/

"GCDDOM-" [color="#4488FF",href="bookvol10.2.pdf#nameddest=GCDDOM",
        shape=ellipse]
/*"GCDDOM-" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"GCDDOM-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GCDDOM-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"GCDDOM-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"GCDDOM-" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"GCDDOM-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"GCDDOM-" -> "FLAGG"
/*"GCDDOM-" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"GCDDOM-" -> "NNI"*/

"HOAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=HOAGG",
        shape=ellipse]
/*"HOAGG" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"HOAGG" -> {"IEVALAB"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"HOAGG" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"HOAGG" -> "FLAGG"
/*"HOAGG" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/
/*"HOAGG" -> "NNI"*/

"HOAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HOAGG",
        shape=ellipse]
/*"HOAGG-" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"HOAGG-" -> {"IEVALAB"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"HOAGG-" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"HOAGG-" -> "FLAGG"
/*"HOAGG-" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/
/*"HOAGG-" -> "NNI"*/

"INDE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INDE"]
/*"INDE" -> {"OAMONS"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"INDE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"INDE" -> {"IDPC"; "NNI"; "INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"}*/
/*"INDE" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"INDE" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"INDE" -> "KONVERT"*/
"INDE" -> "FLAGG"

```

```

/*"INDE" -> {"ELAGG"; "OM"; "LSAGG-"}*/

"INTDOM" [color="#4488FF",href="bookvol10.2.pdf#nameddest=INTDOM",
          shape=ellipse]
/*"INTDOM" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"INTDOM" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"INTDOM" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"INTDOM" -> {"MODULE"; "ENTIRER"}*/
"INTDOM" -> "FIELD"
/*"INTDOM" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "BOOLEAN"}*/

"INTDOM-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INTDOM",
           shape=ellipse]
/*"INTDOM-" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"INTDOM-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"INTDOM-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"INTDOM-" -> {"MODULE"; "ENTIRER"}*/
"INTDOM-" -> "FIELD"
/*"INTDOM-" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "BOOLEAN"}*/

"IPADIC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IPADIC"]
"IPADIC" -> "PADICCT"
/*"IPADIC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"IPADIC" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"IPADIC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"IPADIC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "INT"}*/
/*"IPADIC" -> {"NNI"; "INS-"; "SINT"; "BOOLEAN"; "PI"; "INS"; "UFD"}*/
/*"IPADIC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"IPADIC" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"IPADIC" -> {"PATMAB"; "CFCAT"; "REAL"; "STEP"; "LIST"; "ILIST"}*/
/*"IPADIC" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"IPADIC" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"IPADIC" -> {"ELTAB"; "CLAGG"}*/
"IPADIC" -> "FLAGG"
/*"IPADIC" -> {"ELAGG"; "OM"; "LSAGG-"}*/

"IROOT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IROOT"]
/*"IROOT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"IROOT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"IROOT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"IROOT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"IROOT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"IROOT" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"IROOT" -> {"REAL"; "CHARZ"; "STEP"; "PI"; "NNI"; "INT"; "BOOLEAN"; "SINT"}*/
/*"IROOT" -> {"MONOID-"; "ABELMON-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"IROOT" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"IROOT" -> {"ELTAGG"; "ELTAB"; "CLAGG"}*/
"IROOT" -> "FLAGG"
/*"IROOT" -> {"ELAGG"; "OM"; "LIST"; "ILIST"}*/

"IR2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IR2"]
"IR2" -> "FIELD"
/*"IR2" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"IR2" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/

```



```

/*"IR2" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"IR2" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

"LEXP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LEXP"]
/*"LEXP" -> {"GROUP"; "MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"LEXP" -> {"ORDSET"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LEXP" -> {"ABELMON"; "ABELSG"; "LMODULE"; "BMODULE"; "RMODULE"; "MODULE"}*/
/*"LEXP" -> {"INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"LEXP" -> "FLAGG-"
/*"LEXP" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LEXP" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"LEXP" -> {"CLAGG"; "KONVERT"}*/
"LEXP" -> "FLAGG"
/*"LEXP" -> {"ELAGG"; "OM"; "PI"}*/

"LIECAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LIECAT"]
/*"LIECAT" -> {"MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"}*/
/*"LIECAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"LIECAT" -> {"RMODULE"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"LIECAT" -> "FIELD"
/*"LIECAT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"; "ENTIRER"}*/
/*"LIECAT" -> {"UFD"; "DIVRING"}*/

"LIECAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LIECAT"]
/*"LIECAT-" -> {"MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"}*/
/*"LIECAT-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"LIECAT-" -> {"RMODULE"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"LIECAT-" -> "FIELD"
/*"LIECAT-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"; "ENTIRER"}*/
/*"LIECAT-" -> {"UFD"; "DIVRING"}*/

"LIST2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LIST2"]
/*"LIST2" -> {"TYPE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"LIST2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"LIST2" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"LIST2" -> "FLAGG"
/*"LIST2" -> {"ORDSET"; "ELAGG"}*/

"LIST2MAP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LIST2MAP"]
/*"LIST2MAP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "TYPE"; "INT"; "LIST"}*/
/*"LIST2MAP" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"LIST2MAP" -> "FLAGG-"
/*"LIST2MAP" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"LIST2MAP" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"LIST2MAP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"LIST2MAP" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"LIST2MAP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"LIST2MAP" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"LIST2MAP" -> {"CHARZ"; "STEP"; "OM"}*/

"LMOPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LMOPS"]
/*"LMOPS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"LMOPS" -> {"INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"LMOPS" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/

```

```

/*"LMOPS" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"LMOPS" -> "FLAGG"
/*"LMOPS" -> {"ORDSET"; "ELAGG"; "OM"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"LMOPS" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "SGROUP"}*/
/*"LMOPS" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"LMOPS" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"LMOPS" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "LINEXP"; "PATMAB"}*/
/*"LMOPS" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "LSAGG-"; "STAGG-"}*/
/*"LMOPS" -> "ELAGG-"/
"LMOPS" -> "FLAGG-"
/*"LMOPS" -> {"URAGG-"; "NNI"; "BOOLEAN"}*/

"LSAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LSAGG",
        shape=ellipse]
/*"LSAGG" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LSAGG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"LSAGG" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"LSAGG" -> "FLAGG"
/*"LSAGG" -> {"ORDSET"; "ELAGG"; "BOOLEAN"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"LSAGG" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LSAGG" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"LSAGG" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"LSAGG" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"LSAGG" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"LSAGG" -> {"STEP"; "OM"; "INT"; "NNI"; "SINT"}*/

"LSAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LSAGG",
        shape=ellipse]
/*{"LSAGG-" -> "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"LSAGG-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"LSAGG-" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"LSAGG-" -> "FLAGG"
/*"LSAGG-" -> {"ORDSET"; "ELAGG"; "BOOLEAN"; "INS"; "UFD"; "GCDDOM"}*/
/*"LSAGG-" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LSAGG-" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LSAGG-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LSAGG-" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"LSAGG-" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"LSAGG-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "INT"; "NNI"; "SINT"}*/

"LZSTAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LZSTAGG"]
/*"LZSTAGG" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"LZSTAGG" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"LZSTAGG" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "BOOLEAN"; "INT"}*/
/*"LZSTAGG" -> {"LIST"; "ILIST"; "NNI"; "SINT"; "LSAGG"}*/
"LZSTAGG" -> "FLAGG"
/*"LZSTAGG" -> {"ORDSET"; "ELAGG"; "OM"}*/

"LZSTAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LZSTAGG"]
/*"LZSTAGG-" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LZSTAGG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"LZSTAGG-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"LZSTAGG-" -> {"BOOLEAN"; "INT"; "LIST"; "ILIST"; "NNI"; "SINT"; "LSAGG"}*/
"LZSTAGG-" -> "FLAGG"

```

```

/"LZSTAGG-" -> {"ORDSET"; "ELAGG"; "OM"}*/

"MAGMA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MAGMA"]
/*"MAGMA" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"MAGMA" -> {"BOOLEAN"; "INT"; "LIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"MAGMA" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"MAGMA" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"MAGMA" -> "FLAGG"
/*"MAGMA" -> {"ELAGG"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"MAGMA" -> "FLAGG-"
/*"MAGMA" -> {"PI"; "NNI"}*/

"MESH" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MESH"]
/*"MESH" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"MESH" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"MESH" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"MESH" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"MESH" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"MESH" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"MESH" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "FPS"; "RNS"}*/
"MESH" -> "FIELD"
/*"MESH" -> "DIVRING"*/
"MESH" -> "RADCAT"
/*"MESH" -> {"INT"; "LIST"; "DFLOAT"; "PI"; "NNI"; "SINT"; "ILIST"}*/
/*"MESH" -> "BOOLEAN"*/

"MOEBIUS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MOEBIUS"]
/*"MOEBIUS" -> {"GROUP"; "MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"MOEBIUS" -> "FIELD"
/*"MOEBIUS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"MOEBIUS" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "LMODULE"}*/
/*"MOEBIUS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"MOEBIUS" -> {"DIVRING"; "INT"; "LIST"; "ILIST"; "BOOLEAN"; "LSAGG-"}*/
/*"MOEBIUS" -> {"STAGG-"; "ELAGG-"}*/
"MOEBIUS" -> "FLAGG-"
/*"MOEBIUS" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/

"MODFIELD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MODFIELD"]
"MODFIELD" -> "FIELD"
/*"MODFIELD" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"MODFIELD" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"MODFIELD" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MODFIELD" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"MODFIELD" -> {"DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"MODFIELD" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"MODFIELD" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"MODFIELD" -> "STEP"*/

"MODOP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MODOP"]
/*"MODOP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MODOP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MODOP" -> {"LMODULE"; "RETRACT"; "ELTAB"; "CHARZ"; "CHARNZ"; "ALGEBRA"}*/
/*"MODOP" -> {"MODULE"; "BMODULE"; "RMODULE"; "COMRING"; "LSAGG"; "STAGG"}*/
/*"MODOP" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/

```

```

/*"MODOP" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
"MODOP" -> "FLAGG"
/*"MODOP" -> {"ORDSET"; "ELAGG"; "INT"; "LIST"; "ILIST"; "OM"; "LSAGG-"}*/
/*"MODOP" -> {"STAGG-"; "ELAGG-"}*/
"MODOP" -> "FLAGG-"
/*"MODOP" -> {"URAGG-"; "ES"; "SINT"; "NNI"}*/

"MRING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MRING"]
/*"MRING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MRING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MRING" -> {"RETRACT"; "CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"}*/
/*"MRING" -> {"RMODULE"; "FINITE"; "COMRING"; "INT"; "LIST"; "ILIST"}*/
/*"MRING" -> {"NNI"; "SINT"; "PI"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"MRING" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"MRING" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"MRING" -> "FLAGG"
/*"MRING" -> {"ORDSET"; "ELAGG"; "OM"; "GROUP"; "LSAGG-"; "STAGG-"}*/
/*"MRING" -> {"ELAGG-"; "ORDMON"}*/
"MRING" -> "FLAGG-"

"MTHING" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MTHING"]
/*"MTHING" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"}*/
/*"MTHING" -> {"ILIST"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"MTHING" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"MTHING" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"MTHING" -> "FLAGG"
/*"MTHING" -> {"ELAGG"; "OM"}*/

"NCNTFRAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NCNTFRAC"]
/*"NCNTFRAC" -> {"FPS"; "RNS"}*/
"NCNTFRAC" -> "FIELD"
/*"NCNTFRAC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"NCNTFRAC" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NCNTFRAC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"NCNTFRAC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"NCNTFRAC" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NCNTFRAC" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
"NCNTFRAC" -> "RADCAT"
/*"NCNTFRAC" -> {"PATMAB"; "CHARZ"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"NCNTFRAC" -> {"CFCAT"; "STEP"; "INT"}*/

"NCODIV" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NCODIV"]
/*"NCODIV" -> {"MLO"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NCODIV" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NCODIV" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
"NCODIV" -> "FIELD"
/*"NCODIV" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"NCODIV" -> {"UFD"; "DIVRING"; "NNI"; "INT"; "BOOLEAN"}*/

"NUMTUBE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NUMTUBE"]
/*"NUMTUBE" -> {"PSCURVE"; "KOERCE"; "DFLOAT"; "FPS"; "RNS"}*/
"NUMTUBE" -> "FIELD"
/*"NUMTUBE" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"NUMTUBE" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/

```

```

/*"NUMTUBE" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"NUMTUBE" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"NUMTUBE" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"NUMTUBE" -> {"OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
"NUMTUBE" -> "RADCAT"
/*"NUMTUBE" -> {"PATMAB"; "CHARZ"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"NUMTUBE" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"NUMTUBE" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"NUMTUBE" -> "FLAGG"
/*"NUMTUBE" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"}*/
/*"NUMTUBE" -> {"STAGG-"; "ELAGG-"}*/
"NUMTUBE" -> "FLAGG-"
/*"NUMTUBE" -> {"URAGG-"; "PI"; "BOOLEAN"}*/

"ODR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ODR"]
/*"ODR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "BMODULE"; "LMODULE"}*/
/*"ODR" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "RMODULE"}*/
/*"ODR" -> {"DIFRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"ODR" -> "FIELD"
/*"ODR" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ALGEBRA"}*/
/*"ODR" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "PDRING"; "INS"}*/
/*"ODR" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ODR" -> {"ORDSET"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"ODR" -> {"REAL"; "CHARZ"; "STEP"}*/

"OFMONOID" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OFMONOID"]
/*"OFMONOID" -> {"ORDMON"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"OFMONOID" -> {"MONOID"; "SGROUP"; "RETRACT"; "OAMONS"; "OCAMON"}*/
/*"OFMONOID" -> {"OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"; "NNI"}*/
/*"OFMONOID" -> {"INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"OFMONOID" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"OFMONOID" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"OFMONOID" -> "FLAGG"
/*"OFMONOID" -> {"ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"OFMONOID" -> "FLAGG-"
/*"OFMONOID" -> "BOOLEAN"*/

"ONECOMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ONECOMP"]
/*"ONECOMP" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"ONECOMP" -> "FRETRCT"
/*"ONECOMP" -> {"RETRACT"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ONECOMP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ONECOMP" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"; "BOOLEAN"}*/
/*"ONECOMP" -> {"INT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ONECOMP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ONECOMP" -> {"EUCDOM"; "PID"; "OINTDOM"; "DIFRING"; "KONVERT"; "LINEXP"}*/
/*"ONECOMP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"ORDCOMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ORDCOMP"]
/*"ORDCOMP" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"ORDCOMP" -> "FRETRCT"
/*"ORDCOMP" -> {"RETRACT"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ORDCOMP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ORDCOMP" -> {"ORDSET"; "RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"}*/

```

```

/"ORDCOMP" -> {"BOOLEAN"; "SINT"; "INT"; "INS"; "UFD"; "GCDDOM"}*/
/*"ORDCOMP" -> {"INTDOM"; "COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ORDCOMP" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "DIFRING"}*/
/*"ORDCOMP" -> {"KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"ORDCOMP" -> "STEP"*/

"OREPCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OREPCAT"]
/*"OREPCAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"OREPCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OREPCAT" -> {"LMODULE"; "BMODULE"; "RMODULE"}*/
"OREPCAT" -> "FRETRACT"
/*"OREPCAT" -> {"RETRACT"; "ALGEBRA"; "MODULE"; "NNI"; "INT"; "LIST"}*/
/*"OREPCAT" -> {"ILIST"; "BOOLEAN"; "INTDOM"; "COMRING"; "ENTIRER"; "GCDDOM"}*/
"OREPCAT" -> "FIELD"
/*"OREPCAT" -> {"EUCDOM"; "PID"; "UFD"; "DIVRING"; "INS"; "OINTDOM"}*/
/*"OREPCAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"OREPCAT" -> {"DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"OREPCAT" -> {"CHARZ"; "STEP"}*/

"OREPCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OREPCAT"]
/*"OREPCAT-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"OREPCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OREPCAT-" -> {"LMODULE"; "BMODULE"; "RMODULE"}*/
"OREPCAT-" -> "FRETRACT"
/*"OREPCAT-" -> {"RETRACT"; "ALGEBRA"; "MODULE"; "NNI"; "INT"; "LIST"}*/
/*"OREPCAT-" -> {"ILIST"; "BOOLEAN"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"OREPCAT-" -> "GCDDOM"*/
"OREPCAT-" -> "FIELD"
/*"OREPCAT-" -> {"EUCDOM"; "PID"; "UFD"; "DIVRING"; "INS"; "OINTDOM"}*/
/*"OREPCAT-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"OREPCAT-" -> {"DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"OREPCAT-" -> {"CHARZ"; "STEP"}*/

"OUTFORM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OUTFORM",
           shape=ellipse]
/*"OUTFORM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "STRING"; "CHAR"; "SINT"}*/
/*"OUTFORM" -> {"OUTFORM"; "LIST"; "INT"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"OUTFORM" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"; "ILIST"; "LSAGG-"}*/
/*"OUTFORM" -> {"STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"OUTFORM" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"OUTFORM" -> {"BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"OUTFORM" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"OUTFORM" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"OUTFORM" -> "FLAGG"
/*"OUTFORM" -> {"ORDSET"; "ELAGG"; "OM"; "BOOLEAN"}*/

"OWP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OWP"]
/*"OWP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"OWP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"OWP" -> {"ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "COMRING"}*/
"OWP" -> "FIELD"
/*"OWP" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/

"PACPERC" [color="#88FF44",href="bookvol10.2.pdf#nameddest=PACPERC"]

```

```

"PACPERC" -> "FIELD"
/*"PACPERC" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PACPERC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PACPERC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PACPERC" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE" }*/
/*"PACPERC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

"PADIC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PADIC"]
/*"PADIC" -> "BOOLEAN"*/
"PADIC" -> "PADICCT"
/*"PADIC" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PADIC" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PADIC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PADIC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "INS"}*/
/*"PADIC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PADIC" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"PADIC" -> {"PATMAB"; "CFCAT"; "REAL"; "STEP"}*/

"PATTERN2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PATTERN2"]
/*"PATTERN2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PATTERN2" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PATTERN2" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"PATTERN2" -> "FLAGG"
/*"PATTERN2" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/

"PATLRES" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PATLRES"]
/*"PATLRES" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PATLRES" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PATLRES" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"PATLRES" -> "FLAGG"
/*"PATLRES" -> {"ORDSET"; "ELAGG"; "BOOLEAN"}*/

"PARTPERM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PARTPERM"]
/*"PARTPERM" -> {"INT"; "LIST"; "ILIST"; "SINT"; "NNI"; "BOOLEAN"; "LSAGG"}*/
/*"PARTPERM" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PARTPERM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"PARTPERM" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"PARTPERM" -> "FLAGG"
/*"PARTPERM" -> {"ORDSET"; "ELAGG"; "OM"}*/

"PBWLB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PBWLB"]
/*"PBWLB" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"; "INT"}*/
/*"PBWLB" -> {"LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"PBWLB" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"PBWLB" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"PBWLB" -> "FLAGG"
/*"PBWLB" -> {"ELAGG"; "OM"; "LSAGG-"; "BOOLEAN"; "NNI"}*/

"PENDTREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PENDTREE"]
/*"PENDTREE" -> {"BRAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"PENDTREE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "INT"; "LIST"}*/
/*"PENDTREE" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"PENDTREE" -> "FLAGG-"
/*"PENDTREE" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/

```

```

/*"PENDTREE" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/

"PGE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PGE"]
/*"PGE" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PGE" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PGE" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PGE" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"PGE" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"PGE" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"PGE" -> {"REAL"; "CHARZ"; "STEP"; "SINT"; "NNI"; "INT"}*/
/*"PGE" -> {"LIST"; "ILIST"; "LSAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PGE" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PGE" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"PGE" -> "FLAGG"
/*"PGE" -> {"ELAGG"; "OM"; "STAGG-"; "ELAGG-"; "PI"}*/

"PGROEB" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PGROEB"]
/*"PGROEB" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PGROEB" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PGROEB" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PGROEB" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PGROEB" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PGROEB" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"PGROEB" -> "FLAGG"
/*"PGROEB" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/

"PINTERP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PINTERP"]
"PINTERP" -> "FIELD"
/*"PINTERP" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PINTERP" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PINTERP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PINTERP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PINTERP" -> {"ENTIRER"; "UFD"; "DIVRING"}*/

"PLOTTOOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PLOTTOOL"]
/*"PLOTTOOL" -> {"DFLOAT"; "INT"; "LIST"; "ILIST"; "FPS"; "RNS"}*/
"PLOTTOOL" -> "FIELD"
/*"PLOTTOOL" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PLOTTOOL" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PLOTTOOL" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PLOTTOOL" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PLOTTOOL" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"PLOTTOOL" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
"PLOTTOOL" -> "RADCAT"
/*"PLOTTOOL" -> {"PATMAB"; "CHARZ"}*/

"PFR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PFR"]
"PFR" -> "FIELD"
/*"PFR" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PFR" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PFR" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PFR" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"PFR" -> {"INT"; "LIST"; "ILIST"; "BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"PFR" -> "FLAGG-"

```



```

/*"PFR" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PFR" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"PFR" -> {"CLAGG"; "KONVERT"}*/
"PFR" -> "FLAGG"
/*"PFR" -> {"ORDSET"; "ELAGG"; "OM"; "PI"; "NNI"; "INS"; "OINTDOM"}*/
/*"PFR" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"PFR" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"PMDOWN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMDOWN"]
/*"PMDOWN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "PATMAB"; "RETRACT"}*/
/*"PMDOWN" -> {"INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PMDOWN" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PMDOWN" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"PMDOWN" -> "FLAGG"
/*"PMDOWN" -> {"ORDSET"; "ELAGG"; "OM"}*/

"PRTTITION" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PRTTITION"]
/*"PRTTITION" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"PRTTITION" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"PRTTITION" -> {"KONVERT"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"PRTTITION" -> "ELAGG-"/
"PRTTITION" -> "FLAGG-"
/*"PRTTITION" -> {"BOOLEAN"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"PRTTITION" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"PRTTITION" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"PRTTITION" -> "FLAGG"
/*"PRTTITION" -> {"ELAGG"; "OM"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"PRTTITION" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"}*/
/*"PRTTITION" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PRTTITION" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PRTTITION" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"PRTTITION" -> {"CHARZ"; "STEP"; "URAGG-"; "INS-"}*/

"PMINS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMINS"]
/*"PMINS" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PMINS" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PMINS" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PMINS" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"PMINS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PMINS" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"PMINS" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PMINS" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PMINS" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"PMINS" -> "FLAGG"
/*"PMINS" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"}*/
/*"PMINS" -> {"STAGG-"; "ELAGG-"}*/
"PMINS" -> "FLAGG-"
/*"PMINS" -> "URAGG-"/

"PMLSAGG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMLSAGG"]
/*"PMLSAGG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "PATMAB"; "LSAGG"; "STAGG"}*/
/*"PMLSAGG" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"PMLSAGG" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"PMLSAGG" -> "KONVERT"/

```

```

"PMLSAGG" -> "FLAGG"
/*"PMLSAGG" -> {"ORDSET"; "ELAGG"; "BOOLEAN"; "INT"; "LIST"; "ILIST"}*/

"PMTTOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMTTOOLS"]
/*"PMTTOOLS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"PMTTOOLS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PMTTOOLS" -> {"ORDSET"; "KONVERT"; "RETRACT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PMTTOOLS" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PMTTOOLS" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"PMTTOOLS" -> "FLAGG"
/*"PMTTOOLS" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"PMTTOOLS" -> {"ELAGG-"; "NNI"}*/

"PSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PSCAT"]
"PSCAT" -> "AMR"
/*"PSCAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PSCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PSCAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"PSCAT" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "OAMON"}*/
/*"PSCAT" -> {"OASGP"; "ORDSET"; "INT"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"}*/
/*"PSCAT" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "DIFRING"}*/
/*"PSCAT" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"PSCAT" -> "STEP"*/
"PSCAT" -> "FIELD"
/*"PSCAT" -> "DIVRING"*/

"PSCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PSCAT"]
"PSCAT-" -> "AMR"
/*"PSCAT-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PSCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PSCAT-" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"PSCAT-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"PSCAT-" -> {"INT"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"PSCAT-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "DIFRING"; "KONVERT"}*/
/*"PSCAT-" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"}*/
"PSCAT-" -> "FIELD"
/*"PSCAT-" -> "DIVRING"*/

"QFORM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QFORM"]
/*"QFORM" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"QFORM" -> {"BASTYPE"; "KOERCE"}*/
"QFORM" -> "FIELD"
/*"QFORM" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"QFORM" -> {"RNG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"QFORM" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

"QUEUE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QUEUE"]
/*"QUEUE" -> {"QUAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"QUEUE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "INT"; "LIST"}*/
/*"QUEUE" -> {"ILIST"; "LSAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"QUEUE" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"QUEUE" -> "FLAGG"
/*"QUEUE" -> {"ORDSET"; "ELAGG"; "OM"; "STAGG-"; "ELAGG-"}*/
"QUEUE" -> "FLAGG-"

```

```

/*"QUEUE" -> "URAGG-"/

"RCAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RCAGG",
        shape=ellipse]
/*"RCAGG" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RCAGG" -> {"EVALAB"; "IEVALAB"; "LSAGG"; "STAGG"; "URAGG"; "LNAGG"}*/
/*"RCAGG" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"RCAGG" -> "FLAGG"
/*"RCAGG" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/

"RCAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RCAGG",
        shape=ellipse]
/*"RCAGG-" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RCAGG-" -> {"EVALAB"; "IEVALAB"; "LSAGG"; "STAGG"; "URAGG"; "LNAGG"}*/
/*"RCAGG-" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"RCAGG-" -> "FLAGG"
/*"RCAGG-" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/

"RNS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RNS",
        shape=ellipse]
/*"RNS" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"RNS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RNS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RNS" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"RNS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RNS" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"RNS" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "FPS"; "RNS"}*/
"RNS" -> "FIELD"
/*"RNS" -> "DIVRING"*/
"RNS" -> "RADCAT"
/*"RNS" -> {"NNI"; "INT"; "PI"}*/

"RNS-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RNS",
        shape=ellipse]
/*"RNS-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"RNS-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RNS-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"RNS-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"RNS-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"RNS-" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"RNS-" -> {"REAL"; "CHARZ"; "STEP"; "FPS"; "RNS"}*/
"RNS-" -> "FIELD"
/*"RNS-" -> "DIVRING"*/
"RNS-" -> "RADCAT"
/*"RNS-" -> {"NNI"; "INT"; "PI"}*/

"SCACHE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SCACHE"]
/*"SCACHE" -> {"CACHSET"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"}*/
/*"SCACHE" -> {"LIST"; "NNI"; "BOOLEAN"; "ILIST"; "LSAGG"; "STAGG"}*/
/*"SCACHE" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"SCACHE" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"SCACHE" -> "KONVERT"*/
"SCACHE" -> "FLAGG"
/*"SCACHE" -> {"ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"; "SINT"}*/

```

```

"SEG" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SEG"]
/*"SEG" -> {"SEGCAT"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "SEGXCAT"}*/
/*"SEG" -> {"INT"; "BOOLEAN"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"SEG" -> {"OASGP"; "ORDSET"; "ABELMON"; "ABELSG"; "CABMON"; "ABELGRP"}*/
/*"SEG" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"; "LIST"}*/
/*"SEG" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SEG" -> {"AGG"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"SEG" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"SEG" -> "FLAGG"
/*"SEG" -> {"ELAGG"; "OM"}*/

"SEG2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SEG2"]
/*"SEG2" -> {"TYPE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SEG2" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"}*/
/*"SEG2" -> {"CABMON"; "ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"SEG2" -> {"LMODULE"; "INT"; "LIST"; "BOOLEAN"; "ILIST"; "LSAGG"}*/
/*"SEG2" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "EVALAB"}*/
/*"SEG2" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"SEG2" -> "KONVERT"*/
"SEG2" -> "FLAGG"
/*"SEG2" -> {"ELAGG"; "OM"}*/

"SEXOF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SEXOF"]
/*"SEXOF" -> {"SEXCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"; "ILIST"}*/
/*"SEXOF" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SEXOF" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"SEXOF" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"SEXOF" -> "FLAGG"
/*"SEXOF" -> {"ORDSET"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"SEXOF" -> "FLAGG-"
/*"SEXOF" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"SEXOF" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "NNI"}*/

"STACK" [color="#88FF44",href="bookvol10.3.pdf#nameddest=STACK"]
/*"STACK" -> {"SKAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"STACK" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "INT"; "LIST"; "ILIST"}*/
/*"STACK" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"STACK" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"STACK" -> "FLAGG"
/*"STACK" -> {"ORDSET"; "ELAGG"; "OM"}*/

"STTAYLOR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STTAYLOR"]
/*"STTAYLOR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"STTAYLOR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"STTAYLOR" -> {"LMODULE"; "SINT"; "NNI"; "INT"; "LIST"; "ILIST"}*/
/*"STTAYLOR" -> {"LSAGG-"; "STAGG-"; "PI"; "ALGEBRA"; "MODULE"; "BMODULE"}*/
/*"STTAYLOR" -> {"RMODULE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"STTAYLOR" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"STTAYLOR" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"STTAYLOR" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"STTAYLOR" -> "STEP"*/
"STTAYLOR" -> "FIELD"
/*"STTAYLOR" -> "DIVRING"*/

```

```

"TABLBUMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TABLBUMP"]
/*"TABLBUMP" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"}*/
/*"TABLBUMP" -> {"BOOLEAN"; "ILIST"; "LSAGG-"; "STAGG-"; "PI"; "NNI"}*/
/*"TABLBUMP" -> "ELAGG-"/
"TABLBUMP" -> "FLAGG-"
/*"TABLBUMP" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"TABLBUMP" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"TABLBUMP" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"TABLBUMP" -> "FLAGG"
/*"TABLBUMP" -> "ELAGG"*/

"TABLEAU" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TABLEAU"]
/*"TABLEAU" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"; "ILIST"}*/
/*"TABLEAU" -> {"LSAGG-"; "SINT"; "NNI"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"TABLEAU" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"TABLEAU" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"TABLEAU" -> "FLAGG"
/*"TABLEAU" -> {"ORDSET"; "ELAGG"; "OM"; "STAGG-"}*/

"TOPSP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TOPSP"]
/*"TOPSP" -> {"FPS"; "RNS"}*/
"TOPSP" -> "FIELD"
/*"TOPSP" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"TOPSP" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"TOPSP" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"TOPSP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"TOPSP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"TOPSP" -> {"REAL"; "KONVERT"; "RETRACT"}*/
"TOPSP" -> "RADCAT"
/*"TOPSP" -> {"PATMAB"; "CHARZ"}*/

"TRANFUN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=TRANFUN"]
/*"TRANFUN" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RING"}*/
/*"TRANFUN" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"TRANFUN" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"TRANFUN" -> {"PI"; "NNI"; "INT"}*/
"TRANFUN" -> "FIELD"
/*"TRANFUN" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"TRANFUN" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

"TRANFUN-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TRANFUN"]
/*"TRANFUN-" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RING"}*/
/*"TRANFUN-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"TRANFUN-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "PI"}*/
/*"TRANFUN-" -> {"NNI"; "INT"}*/
"TRANFUN-" -> "FIELD"
/*"TRANFUN-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"TRANFUN-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

"TUBE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TUBE"]
/*"TUBE" -> {"PSCURVE"; "KOERCE"; "FPS"; "RNS"}*/
"TUBE" -> "FIELD"
/*"TUBE" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/

```

```

/*"TUBE" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"TUBE" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"TUBE" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"TUBE" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"TUBE" -> {"REAL"; "KONVERT"; "RETRACT"}*/
"TUBE" -> "RADCAT"
/*"TUBE" -> {"PATMAB"; "CHARZ"; "BOOLEAN"}*/

"UDPO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UDPO"]
/*"UDPO" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"; "ILIST"}*/
/*"UDPO" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"UDPO" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"UDPO" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"UDPO" -> "FLAGG"
/*"UDPO" -> {"ORDSET"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/

"UFD" [color="#4488FF",href="bookvol10.2.pdf#nameddest=UFD",
      shape=ellipse]
/*"UFD" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"UFD" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UFD" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"UFD" -> {"MODULE"; "ENTIRER"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"UFD" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"UFD" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
"UFD" -> "FLAGG"
/*"UFD" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/

"UFD-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UFD-",
      shape=ellipse]
/*"UFD-" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"UFD-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"UFD-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"UFD-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "LSAGG"}*/
/*"UFD-" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"UFD-" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"UFD-" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"UFD-" -> "FLAGG"
/*"UFD-" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/

"UNISEG" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UNISEG"]
/*"UNISEG" -> {"SEGCAT"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "SEGXCAT"}*/
/*"UNISEG" -> {"INT"; "BOOLEAN"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"UNISEG" -> {"OASGP"; "ORDSET"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"UNISEG" -> {"ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UNISEG" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"UNISEG" -> "FLAGG-"
/*"UNISEG" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"UNISEG" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/

"URAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=URAGG",
      shape=ellipse]
/*"URAGG" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"URAGG" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "BOOLEAN"; "INT"; "LIST"}*/
/*"URAGG" -> {"ILIST"; "LSAGG"; "STAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/

```

```

/*"URAGG" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"URAGG" -> "FLAGG"
/*"URAGG" -> {"ORDSET"; "ELAGG"; "OM"; "NNI"; "SINT"}*/

"URAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=URAGG",
        shape=ellipse]
/*"URAGG-" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"URAGG-" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "BOOLEAN"; "INT"; "LIST"}*/
/*"URAGG-" -> {"ILIST"; "LSAGG"; "STAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"URAGG-" -> {"ELTAB"; "CLAGG"; "KONVERT"}*/
"URAGG-" -> "FLAGG"
/*"URAGG-" -> {"ORDSET"; "ELAGG"; "OM"; "NNI"; "SINT"}*/

"VIEW" [color="#FF4488",href="bookvol10.4.pdf#nameddest=VIEW"]
/*"VIEW" -> {"INT"; "LIST"; "FPS"; "RNS"}*/
"VIEW" -> "FIELD"
/*"VIEW" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"VIEW" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"VIEW" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"VIEW" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"VIEW" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"VIEW" -> {"OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
"VIEW" -> "RADCAT"
/*"VIEW" -> {"PATMAB"; "CHARZ"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"VIEW" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"VIEW" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
"VIEW" -> "FLAGG"
/*"VIEW" -> {"ELAGG"; "OM"; "ILIST"; "SINT"; "PI"; "NNI"}*/

"VSPACE" [color="#4488FF",href="bookvol10.2.pdf#nameddest=VSPACE"]
"VSPACE" -> "FIELD"
/*"VSPACE" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"VSPACE" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"VSPACE" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"VSPACE" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"VSPACE" -> {"UFD"; "DIVRING"}*/

"VSPACE-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VSPACE"]
"VSPACE-" -> "FIELD"
/*"VSPACE-" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"VSPACE-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"VSPACE-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"VSPACE-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"VSPACE-" -> {"UFD"; "DIVRING"}*/

"XPOLYC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=XPOLYC"]
"XPOLYC" -> "XFALG"
/*"XPOLYC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"XPOLYC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"XPOLYC" -> {"LMODULE"; "XALG"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"XPOLYC" -> {"MODULE"; "RETRACT"}*/

"XPR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=XPR"]
/*"XPR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/

```

```

/*"XPR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"XPR" -> {"XALG"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "FMCAT"}*/
/*"XPR" -> {"RETRACT"; "COMRING"; "ORDMON"; "ORDSET"; "LSAGG"; "STAGG"}*/
/*"XPR" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"XPR" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"XPR" -> "KONVERT"*/
"XPR" -> "FLAGG"
/*"XPR" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"XPR" -> "ELAGG-"*/
"XPR" -> "FLAGG-"
/*"XPR" -> {"URAGG-"; "BOOLEAN"; "NNI"}*/
"XPR" -> "FIELD"
/*"XPR" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"}*/
/*"XPR" -> "DIVRING"*/

```

1.4.10 Layer8

Depends on: A1AGG A1AGG- ARR2CAT FAMR FPC LIECAT LZSTAGG OREPCAT
PSCAT TRANFUN VSPACE XPOLYC PACPERC

Used by next layer: BTAGG FLALG MATCAT SRAGG VECTCAT

— layer8 —

```

LAYER8=\
  ${OUT}/AFFSP.o \
  ${OUT}/APPLYORE.o ${OUT}/ARRAY1.o ${OUT}/ARRAY12.o ${OUT}/ARRAY2.o \
  ${OUT}/ASTACK.o ${OUT}/BTAGG.o ${OUT}/BTAGG-.o ${OUT}/COMBINAT.o \
  ${OUT}/CSTTOOLS.o ${OUT}/D01FCFA.o ${OUT}/E04MBFA.o ${OUT}/FAMR2.o \
  ${OUT}/FARRAY.o ${OUT}/FLALG.o ${OUT}/FSFUN.o \
  ${OUT}/GALUTIL.o ${OUT}/HEAP.o \
  ${OUT}/IARRAY1.o ${OUT}/IARRAY2.o ${OUT}/IFARRAY.o ${OUT}/INTCAT.o \
  ${OUT}/INTHEORY.o ${OUT}/IRREDFFX.o ${OUT}/LFCAT.o ${OUT}/LODOCAT.o \
  ${OUT}/LODOCAT-.o ${OUT}/LWORD.o ${OUT}/MATCAT.o ${OUT}/MATCAT-.o \
  ${OUT}/MATSTOR.o ${OUT}/ORESUP.o ${OUT}/OREPCTO.o ${OUT}/OREUP.o \
  ${OUT}/PACFFC.o \
  ${OUT}/PLOT3D.o ${OUT}/POLYVEC.o \
  ${OUT}/PR.o ${OUT}/PREASSOC.o ${OUT}/PRIMARR2.o \
  ${OUT}/PROJSP.o \
  ${OUT}/REDORDER.o ${OUT}/SRAGG.o ${OUT}/SRAGG-.o ${OUT}/STREAM.o \
  ${OUT}/SYMPOLY.o ${OUT}/TS.o ${OUT}/TUPLE.o ${OUT}/UPSCAT.o \
  ${OUT}/UPSCAT-.o ${OUT}/U8VEC.o ${OUT}/U16VEC.o ${OUT}/U32VEC.o \
  ${OUT}/VECTCAT.o ${OUT}/VECTCAT-.o ${OUT}/XDPOLY.o \
  ${OUT}/XEXPPKG.o ${OUT}/XF.o ${OUT}/XF-.o ${OUT}/XPBWPOLY.o \
  ${OUT}/XPOLY.o ${OUT}/XRPOLY.o \
layer8done

```

— layerpic —


```

/* layer 8 */
/* depends on: A1AGG A1AGG- ARR2CAT FAMR FPC LIECAT LZSTAGG OREPCAT PSCAT */
/* TRANFUN VSPACE XPOLYC PACPREC */

"AFFSP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AFFSP"]
/*"AFFSP" -> {"AFSPCAT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"}*/
/*"AFFSP" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"AFFSP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"AFFSP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"AFFSP" -> {"ENTIRER"; "UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"AFFSP" -> {"PI"; "NNI"; "FFIELDC"}*/
"AFFSP" -> "FPC"
"AFFSP" -> "PACPERC"
/*"AFFSP" -> {"CHARNZ"; "FINITE"; "STEP"; "DIFRING"; "STAGG-"; "ELAGG-"}*/
/*"AFFSP" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"AFFSP" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"AFFSP" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"AFFSP" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"AFFSP" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/
/*"AFFSP" -> {"BOOLEAN"}*/

"APPLYORE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=APPLYORE"]
/*"APPLYORE" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"APPLYORE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"APPLYORE" -> "LMODULE"*/
"APPLYORE" -> "OREPCAT"
/*"APPLYORE" -> {"BMODULE"; "RMODULE"; "FRETRACT"; "RETRACT"; "ALGEBRA"}*/
/*"APPLYORE" -> {"MODULE"; "SINT"; "NNI"; "INT"}*/

"ARRAY1" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ARRAY1"]
"ARRAY1" -> "A1AGG"
/*"ARRAY1" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ARRAY1" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"ARRAY1" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INT"; "LSAGG"}*/
/*"ARRAY1" -> {"STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"}*/
/*"ARRAY1" -> {"NNI"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ARRAY1" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ARRAY1" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ARRAY1" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"ARRAY1" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ARRAY1" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"ARRAY1" -> {"REAL"; "CHARZ"; "STEP"}*/

"ARRAY12" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ARRAY12"]
/*"ARRAY12" -> "TYPE"*/
"ARRAY12" -> "A1AGG"
/*"ARRAY12" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "SETCAT"}*/
/*"ARRAY12" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"ARRAY12" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/

"ARRAY2" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ARRAY2"]
"ARRAY2" -> "ARR2CAT"
/*"ARRAY2" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ARRAY2" -> {"EVALAB"; "IEVALAB"}*/

```

```

"ARRAY2" -> "A1AGG"
/*"ARRAY2" -> {"FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"ARRAY2" -> {"KONVERT"; "ORDSET"; "INT"}*/

"ASTACK" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASTACK"]
/*"ASTACK" -> {"SKAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"ASTACK" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "INT"}*/
"ASTACK" -> "A1AGG"
/*"ASTACK" -> {"FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"ASTACK" -> {"KONVERT"; "ORDSET"; "ELAGG"; "LIST"; "ILIST"; "SINT"}*/
/*"ASTACK" -> {"NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"ASTACK" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"ASTACK" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"ASTACK" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ASTACK" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"ASTACK" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ASTACK" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"ASTACK" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"ASTACK" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"ASTACK" -> {"STEP"; "OM"}*/

"BTAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=BTAGG"]
/*"BTAGG" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "LOGIC"}*/
"BTAGG" -> "A1AGG"
/*"BTAGG" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"BTAGG" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/

"BTAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BTAGG"]
/*"BTAGG-" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "LOGIC"}*/
"BTAGG-" -> "A1AGG"
/*"BTAGG-" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"BTAGG-" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/

"COMBINAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMBINAT"]
/*"COMBINAT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"COMBINAT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"COMBINAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"COMBINAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"COMBINAT" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"COMBINAT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"COMBINAT" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"COMBINAT" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "NNI"; "INT"; "OM"}*/
"COMBINAT" -> "A1AGG"
/*"COMBINAT" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"COMBINAT" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"COMBINAT" -> {"ELAGG"; "SINT"; "MONOID-"; "ABELMON-"; "PI"}*/

"CSTTOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CSTTOOLS"]
/*"CSTTOOLS" -> "TYPE"*/
"CSTTOOLS" -> "LZSTAGG"
/*"CSTTOOLS" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "SETCAT"}*/
/*"CSTTOOLS" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"CSTTOOLS" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "SINT"}*/
/*"CSTTOOLS" -> {"NNI"; "INT"}*/

```

```

"D01FCFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01FCFA"]
/*"D01FCFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"D01FCFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"D01FCFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"D01FCFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"D01FCFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"D01FCFA" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"D01FCFA" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"}*/
/*"D01FCFA" -> {"PATMAB"; "CHARZ"; "SINT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"D01FCFA" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"D01FCFA" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"D01FCFA" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"}*/
/*"D01FCFA" -> {"STAGG-"; "DIFRING"}*/
"D01FCFA" -> "TRANFUN"
/*"D01FCFA" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"D01FCFA" -> {"PI"; "MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"}*/
/*"D01FCFA" -> {"DFLOAT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"D01FCFA" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"D01FCFA" -> "ABELGRP-"}*/

"E04MBFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04MBFA"]
/*"E04MBFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"E04MBFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"E04MBFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"E04MBFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"E04MBFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"E04MBFA" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"E04MBFA" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"}*/
/*"E04MBFA" -> {"PATMAB"; "CHARZ"; "DIFRING"; "OM"}*/
"E04MBFA" -> "TRANFUN"
/*"E04MBFA" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"E04MBFA" -> {"INT"; "NNI"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"E04MBFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"E04MBFA" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"E04MBFA" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "ELAGG-"; "DFLOAT"}*/
/*"E04MBFA" -> {"PI"; "INS-"; "MONOID-"; "ABELMON-"; "BOOLEAN"}*/

"FAMR2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FAMR2"]
/*"FAMR2" -> {"OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FAMR2" -> {"ABELMON"; "ABELSG"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FAMR2" -> {"SGROUP"; "MONOID"; "LMODULE"}*/
"FAMR2" -> "FAMR"
/*"FAMR2" -> {"AMR"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"FAMR2" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"FAMR2" -> {"FRETRCT"; "RETRACT"}*/

"FARRAY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FARRAY"]
/*"FARRAY" -> "INT"*/
"FARRAY" -> "A1AGG"
/*"FARRAY" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"FARRAY" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FARRAY" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "ELAGG"; "INS"}*/
/*"FARRAY" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/

```

```

/*"FARRAY" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"FARRAY" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FARRAY" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"FARRAY" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"FARRAY" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"FARRAY" -> {"STEP"; "OM"}*/

"FLALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FLALG"]
"FLALG" -> "LIECAT"
/*"FLALG" -> {"MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FLALG" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"}*/

"FSFUN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSFUN"]
/*"FSFUN" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FSFUN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FSFUN" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FSFUN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FSFUN" -> {"ENTIRER"; "LORER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"FSFUN" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"FSFUN" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INT"; "DIFRING"; "OM"}*/
"FSFUN" -> "TRANFUN"
/*"FSFUN" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PI"; "NNI"}*/
/*"FSFUN" -> {"INS"; "OINTDOM"; "LINEXP"; "CFCAT"; "STEP"; "SINT" }*/
/*"FSFUN" -> {"MONOID-"; "ABELMON-"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"FSFUN" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
/*"FSFUN" -> {"RING-"; "ABELGRP-"}*/

"GALUTIL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GALUTIL"]
/*"GALUTIL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"GALUTIL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GALUTIL" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"GALUTIL" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"GALUTIL" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"GALUTIL" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"GALUTIL" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INT"; "NNI"; "PI"}*/
"GALUTIL" -> "A1AGG"
/*"GALUTIL" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"GALUTIL" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "ELAGG"}*/

"HEAP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HEAP"]
/*"HEAP" -> {"PRQAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"HEAP" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ORDSET"}*/
/*"HEAP" -> {"INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"HEAP" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"}*/
/*"HEAP" -> {"OM"; "LIST"; "ILIST"; "NNI"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"HEAP" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"HEAP" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "PI"}*/
"HEAP" -> "A1AGG"
/*"HEAP" -> "SINT"*/

"IARRAY1" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IARRAY1"]
"IARRAY1" -> "A1AGG"
/*"IARRAY1" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"IARRAY1" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/

```

```

/*"IARRAY1" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "SINT"; "NNI"}*/
/*"IARRAY1" -> {"INT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IARRAY1" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IARRAY1" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"IARRAY1" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"IARRAY1" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"IARRAY1" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"IARRAY1" -> {"CHARZ"; "STEP"; "OM"}*/

"IARRAY2" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IARRAY2"]
"IARRAY2" -> "ARR2CAT"
/*"IARRAY2" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"IARRAY2" -> {"EVALAB"; "IEVALAB"}*/
"IARRAY2" -> "A1AGG"
/*"IARRAY2" -> {"FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"IARRAY2" -> {"KONVERT"; "ORDSET"}*/

"IFARRAY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IFARRAY"]
"IFARRAY" -> "A1AGG"
/*"IFARRAY" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"IFARRAY" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"IFARRAY" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "ELAGG"; "BOOLEAN"}*/
/*"IFARRAY" -> {"INT"; "PRIMARR"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"IFARRAY" -> {"OM"; "LIST"; "ILIST"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"IFARRAY" -> {"SINT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"IFARRAY" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"IFARRAY" -> {"ABELGRP-"; "ABELMON-"; "PI"; "INS"; "UFD"; "GCDDOM"}*/
/*"IFARRAY" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"IFARRAY" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IFARRAY" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"IFARRAY" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"IFARRAY" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"IFARRAY" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"INTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=INTCAT"]
/*"INTCAT" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTCAT" -> {"CABMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"INTCAT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INTCAT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
"INTCAT" -> "TRANFUN"
/*"INTCAT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"}*/
/*"INTCAT" -> "RETRACT"*/

"INTHEORY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTHEORY"]
/*"INTHEORY" -> {"NNI"; "INT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INTHEORY" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INTHEORY" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INTHEORY" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INTHEORY" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"INTHEORY" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"INTHEORY" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"INTHEORY" -> {"REAL"; "CHARZ"; "STEP"; "SINT"; "PI"; "INS-"; "EUCDOM-"}*/
/*"INTHEORY" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"INTHEORY" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

```

```

/*"INTHEORY" -> {"MONOID-"; "ORDSET-"; "ABELSG-"; "SGROUP-"}*/
"INTHEORY" -> "A1AGG"
/*"INTHEORY" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"INTHEORY" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "ELAGG"}*/
/*"INTHEORY" -> {"BOOLEAN"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"INTHEORY" -> "FLAGG-"/>

```

"IRREDFFX" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IRREDFFX"]

```

/*"IRREDFFX" -> "FFIELDC"*/
"IRREDFFX" -> "FPC"
/*"IRREDFFX" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IRREDFFX" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IRREDFFX" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"IRREDFFX" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"IRREDFFX" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"}*/
/*"IRREDFFX" -> {"DIFRING"; "INT"; "PI"; "NNI"; "BOOLEAN"; "MONOID-"}*/
/*"IRREDFFX" -> {"ABELSG-"; "SGROUP-"}*/

```

"LFCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LFCAT"]

```

/*"LFCAT" -> "PRIMCAT"*/
"LFCAT" -> "TRANFUN"
/*"LFCAT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/

```

"LODOCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LODOCAT"]

```

/*"LODOCAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LODOCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LODOCAT" -> "LMODULE"*/
"LODOCAT" -> "OREPCAT"
/*"LODOCAT" -> {"BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"; "ALGEBRA"}*/
/*"LODOCAT" -> {"MODULE"; "ELTAB"; "NNI"; "INT"; "BOOLEAN"; "FIELD"}*/
/*"LODOCAT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"LODOCAT" -> {"ENTIRER"; "UFD"; "DIVRING"}*/

```

"LODOCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LODOCAT"]

```

/*"LODOCAT-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LODOCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LODOCAT-" -> "LMODULE"*/
"LODOCAT-" -> "OREPCAT"
/*"LODOCAT-" -> {"BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"; "ALGEBRA"}*/
/*"LODOCAT-" -> {"MODULE"; "ELTAB"; "NNI"; "INT"; "BOOLEAN"; "FIELD"}*/
/*"LODOCAT-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"LODOCAT-" -> {"ENTIRER"; "UFD"; "DIVRING"}*/

```

"LWORD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LWORD"]

```

/*"LWORD" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"LWORD" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"LWORD" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"LWORD" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"}*/
/*"LWORD" -> {"OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"LWORD" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"LWORD" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"LWORD" -> {"NNI"; "PI"}*/
"LWORD" -> "A1AGG"
/*"LWORD" -> "SINT"*/

```

```

"MATCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MATCAT"]
"MATCAT" -> "ARR2CAT"
/*"MATCAT" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MATCAT" -> {"EVALAB"; "IEVALAB"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"MATCAT" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MATCAT" -> {"FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"MATCAT" -> {"KONVERT"; "ORDSET"; "NNI"; "INT"; "BOOLEAN"; "SINT"}*/
/*"MATCAT" -> {"LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/
/*"MATCAT" -> {"OM"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"MATCAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"MATCAT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"MATCAT" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"MATCAT" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "FIELD"; "DIVRING"; "INS-"}*/

"MATCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MATCAT"]
"MATCAT-" -> "ARR2CAT"
/*"MATCAT-" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MATCAT-" -> {"EVALAB"; "IEVALAB"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"MATCAT-" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MATCAT-" -> {"FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"MATCAT-" -> {"KONVERT"; "ORDSET"; "NNI"; "INT"; "BOOLEAN"; "SINT"}*/
/*"MATCAT-" -> {"LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"MATCAT-" -> {"ELAGG"; "OM"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"MATCAT-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"MATCAT-" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"MATCAT-" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"MATCAT-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "FIELD"; "DIVRING"; "INS-"}*/

"MATSTOR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MATSTOR"]
/*"MATSTOR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MATSTOR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MATSTOR" -> {"LMODULE"; "NNI"; "INT"; "SINT"; "PRIMARR"}*/
"MATSTOR" -> "A1AGG"
/*"MATSTOR" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"MATSTOR" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"MATSTOR" -> {"BOOLEAN"}*/

"MTSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MTSCAT",
shape=ellipse]
/*"MTSCAT" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"MTSCAT" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"MTSCAT" -> {"MTSCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"MTSCAT" -> {"MONOID"; "LMODULE"}*/
"MTSCAT" -> "PSCAT"
/*"MTSCAT" -> {"AMR"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"MTSCAT" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "IEVALAB"}*/
/*"MTSCAT" -> {"EVALAB"; "RADCAT"}*/
"MTSCAT" -> "TRANFUN"
/*"MTSCAT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/

"ORESUP" -> "OREPCAT"
/*"ORESUP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ORESUP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/

```

```

/*"ORESUP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "FRETRACT"; "RETRACT"}*/
/*"ORESUP" -> {"ALGEBRA"; "MODULE"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"ORESUP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"ORESUP" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ORESUP" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "LINEXP"}*/
/*"ORESUP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"OREPCTO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OREPCTO"]
/*"OREPCTO" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"OREPCTO" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"OREPCTO" -> "OREPCAT"
/*"OREPCTO" -> {"BMODULE"; "RMODULE"; "FRETRACT"; "RETRACT"; "ALGEBRA"}*/
/*"OREPCTO" -> {"MODULE"; "BOOLEAN"; "NNI"; "INT"; "SINT"; "INTDOM"}*/
/*"OREPCTO" -> {"COMRING"; "ENTIRER"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"OREPCTO" -> {"UFD"; "DIVRING"}*/

"OREUP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OREUP"]
"OREUP" -> "OREPCAT"
/*"OREUP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"OREUP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OREUP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "FRETRACT"; "RETRACT"}*/
/*"OREUP" -> {"ALGEBRA"; "MODULE"; "NNI"; "INT"; "FIELD"; "EUCDOM"}*/
/*"OREUP" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"}*/
/*"OREUP" -> {"DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"OREUP" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "LINEXP"}*/
/*"OREUP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"PACFFC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PACFFC",
          shape=ellipse]
/*"PACFFC" -> {"FFIELDC"}*/
"PACFFC" -> "FPC"
/*"PACFFC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PACFFC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PACFFC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PACFFC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PACFFC" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*"PACFFC" -> {"STEP"; "DIFRING"}*/
"PACFFC" -> "PACPERC"

"PLOT3D" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PLOT3D"]
/*"PLOT3D" -> {"PSCURVE"; "KOERCE"; "BOOLEAN"; "INT"; "DFLOAT"; "FPS-"}*/
/*"PLOT3D" -> {"RNS-"; "FIELD-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"}*/
/*"PLOT3D" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PLOT3D" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PLOT3D" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PLOT3D" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"PLOT3D" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"PLOT3D" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"PLOT3D" -> {"LIST"; "ILIST"; "NNI"; "PI"; "LSAGG-"; "STAGG-"}*/
/*"PLOT3D" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PLOT3D" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PLOT3D" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"PLOT3D" -> {"ELAGG"; "OM"; "SINT"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"PLOT3D" -> {"DIVRING-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/

```



```

/*"PLOT3D" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "MONOID-"}*/
/*"PLOT3D" -> {"ORDSET-"; "ABELSG-"; "SGROUP-"; "INS"; "OINTDOM"}*/
/*"PLOT3D" -> {"DIFRING"; "LINEXP"; "CFCAT"; "STEP"; "INS-"}*/
"PLOT3D" -> "TRANFUN"
/*"PLOT3D" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/

"POLYVEC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLYVEC"]
/*"POLYVEC" -> {"SINT" "NNI" "INT"}*/
"POLYVEC" -> "A1AGG"
/*"POLYVEC" -> {"FLAGG" "LNAGG" "IXAGG" "HOAGG" "AGG" "TYPE" "SETCAT"}*/
/*"POLYVEC" -> {"BASTYPE" "KOERCE" "EVALAB" "IEVALAB" "ELTAGG" "ELTAB"}*/
/*"POLYVEC" -> {"CLAGG" "KONVERT" "ORDSET" "BOOLEAN" "INS" "UFD" "GCDDOM"} */
/*"POLYVEC" -> {"INTDOM" "COMRING" "RING" "RNG" "ABELGRP" "CABMON"}*/
/*"POLYVEC" -> {"ABELMON" "ABELSG" "SGROUP" "MONOID" "LMODULE" "BMODULE"}*/
/*"POLYVEC" -> {"RMODULE" "ALGEBRA" "MODULE" "ENTIRER" "EUCDOM" "PID"}*/
/*"POLYVEC" -> {"OINTDOM" "ORDRING" "OAGROUP" "OCAMON" "OAMON" "OASGP"}*/
/*"POLYVEC" -> {"DIFRING" "RETRACT" "LINEXP" "PATMAB" "CFCAT" "REAL"}*/
/*"POLYVEC" -> {"CHARZ" "STEP" "INS-" "EUCDOM-" "UFD-" "GCDDOM-" "INTDOM-"}*/
/*"POLYVEC" -> {"ALGEBRA-" "DIFRING-" "ORDRING-" "MODULE-" "RING-"}*/
/*"POLYVEC" -> {"ABELGRP-" "ABELMON-" "MONOID-" "ORDSET-" "ABELSG-"}*/
/*"POLYVEC" -> {"SGROUP-" "SETCAT-" "RETRACT-" "BASTYPE-" "PI" "PRIMARR"}*/

"PR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PR"]
"PR" -> "FAMR"
/*"PR" -> {"AMR"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PR" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"PR" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"PR" -> {"OAMON"; "OASGP"; "ORDSET"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PR" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"PR" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"PR" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"PR" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "BOOLEAN"; "LNAGG-"; "RCAGG-"}*/
/*"PR" -> {"IXAGG-"; "NNI"; "PI"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PR" -> {"UFD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PR" -> {"OCAMON"; "DIFRING"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"}*/

"PREASSOC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PREASSOC"]
/*"PREASSOC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PREASSOC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PREASSOC" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PREASSOC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "LODOCAT"}*/
"PREASSOC" -> "OREPCAT"
/*"PREASSOC" -> {"FRETRCT"; "RETRACT"; "ELTAB"; "NNI"; "INT"; "PI"}*/
/*"PREASSOC" -> {"PRIMARR"; "SINT"}*/
"PREASSOC" -> "A1AGG"
/*"PREASSOC" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PREASSOC" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
/*"PREASSOC" -> "ORDSET"*/

"PRIMARR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PRIMARR",
           shape=ellipse]
"PRIMARR" -> "A1AGG"
/*"PRIMARR" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/

```

```

/*"PRIMARR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"PRIMARR" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"PRIMARR" -> {"INT"; "PRIMARR"; "SINT"; "NNI"; "INS"; "UFD"; "GCDDOM"}*/
/*"PRIMARR" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PRIMARR" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PRIMARR" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PRIMARR" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PRIMARR" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"PRIMARR" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"PRIMARR2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PRIMARR2"]
/*"PRIMARR2" -> "TYPE"*/
"PRIMARR2" -> "A1AGG"
/*"PRIMARR2" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "SETCAT"}*/
/*"PRIMARR2" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"PRIMARR2" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/

"PROJSP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PROJSP",
          shape=ellipse]
/*"PROJSP" -> {"PRSPCAT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PROJSP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"PROJSP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "FFIELDC"}*/
/*"PROJSP" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PROJSP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PROJSP" -> {"UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "PI"; "NNI"}*/
"PROJSP" -> "PACPERC"
"PROJSP" -> "FPC"
/*"PROJSP" -> {"CHARNZ"; "FINITE"; "STEP"; "DIFRING"; "LSAGG-"; "STAGG-"}*/
/*"PROJSP" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"PROJSP" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"PROJSP" -> {"BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"PROJSP" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"PROJSP" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"}*/
/*"PROJSP" -> {"ELAGG"; "OM"; "BOOLEAN"}*/

"REDORDER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REDORDER"]
/*"REDORDER" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"REDORDER" -> {"RING"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"REDORDER" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"REDORDER" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"REDORDER" -> {"ENTIRER"; "UFD"; "DIVRING"; "LODOCAT"}*/
"REDORDER" -> "OREPCAT"
/*"REDORDER" -> {"FRETRCT"; "RETRACT"; "ELTAB"; "INT"; "INS-"; "PRIMARR"}*/
/*"REDORDER" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "BOOLEAN"}*/
/*"REDORDER" -> "NNI"*/
"REDORDER" -> "A1AGG"
/*"REDORDER" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"REDORDER" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
/*"REDORDER" -> {"ORDSET"; "SINT"}*/

"SRAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SRAGG"]
"SRAGG" -> "A1AGG"
/*"SRAGG" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"SRAGG" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/

```

```

/*"SRAGG" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INS"; "UFD"; "GCDDOM"}*/
/*"SRAGG" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SRAGG" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SRAGG" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"SRAGG" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SRAGG" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"SRAGG" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "NNI"; "INT"}*/

"SRAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SRAGG"]
"SRAGG-" -> "A1AGG"
/*"SRAGG-" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SRAGG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"SRAGG-" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INS"}*/
/*"SRAGG-" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"SRAGG-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"SRAGG-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"SRAGG-" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"SRAGG-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SRAGG-" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"SRAGG-" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "NNI"; "INT"}*/

"STREAM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=STREAM"]
"STREAM" -> "LZSTAGG"
/*"STREAM" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"STREAM" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"STREAM" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "INT"; "LIST"; "ILIST"}*/
/*"STREAM" -> {"SINT"; "NNI"; "BOOLEAN"; "LSAGG"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"STREAM" -> {"OM"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"STREAM" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"STREAM" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"STREAM" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"STREAM" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"STREAM" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"SYMPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SYMPOLY"]
/*"SYMPOLY" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"SYMPOLY" -> {"KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
"SYMPOLY" -> "FAMR"
/*"SYMPOLY" -> {"AMR"; "RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"}*/
/*"SYMPOLY" -> {"LMODULE"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"SYMPOLY" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"SYMPOLY" -> {"FRETRCT"; "RETRACT"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/
/*"SYMPOLY" -> {"KONVERT"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"; "PID"}*/
/*"SYMPOLY" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "DIFRING"; "LINEXP"}*/
/*"SYMPOLY" -> {"PATMAB"; "CFCAT"; "REAL"; "STEP"; "FIELD"; "DIVRING"}*/

"TS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TS"]
/*"TS" -> {"MTSCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"TS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"TS" -> {"MONOID"; "LMODULE"}*/
"TS" -> "PSCAT"
/*"TS" -> {"AMR"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"TS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "IEVALAB"; "EVALAB"}*/
/*"TS" -> "RADCAT"*/

```

```

"TS" -> "TRANFUN"
/*"TS" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SINT"; "NNI"}*/
/*"TS" -> {"INT"; "BOOLEAN"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"; "PID"}*/
/*"TS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"TS" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"TS" -> {"CFCAT"; "REAL"; "STEP"; "FIELD"; "DIVRING"}*/

"TUPLE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TUPLE"]
/*"TUPLE" -> {"KOERCE"; "SETCAT"; "BASTYPE"; "TYPE"}*/
"TUPLE" -> "A1AGG"
/*"TUPLE" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "EVALAB"; "IEVALAB"}*/
/*"TUPLE" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INT"}*/
/*"TUPLE" -> {"PRIMARR"; "NNI"}*/
"TUPLE" -> "A1AGG-"
/*"TUPLE" -> {"BOOLEAN"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"TUPLE" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"TUPLE" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"TUPLE" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"TUPLE" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"TUPLE" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"TUPLE" -> {"STEP"; "OM"; "FLAGG-"; "LNAGG-"}*/

"UPSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=UPSCAT"]
"UPSCAT" -> "PSCAT"
/*"UPSCAT" -> {"AMR"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"UPSCAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"UPSCAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"UPSCAT" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"}*/
/*"UPSCAT" -> {"DIFRING"; "PDRING"; "OAMON"; "OASGP"; "ORDSET"; "INT"}*/
/*"UPSCAT" -> {"LIST"; "ILIST"; "LSAGG-"}*/

"UPSCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UPSCAT"]
"UPSCAT-" -> "PSCAT"
/*"UPSCAT-" -> {"AMR"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"UPSCAT-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"UPSCAT-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"UPSCAT-" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"UPSCAT-" -> {"ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "OAMON"; "OASGP"}*/
/*"UPSCAT-" -> {"ORDSET"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/

"U8VEC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=U8VEC"]
"U8VEC" -> "A1AGG"
/*"U8VEC" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"U8VEC" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"U8VEC" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INT"; "SINT"; "NNI"; "INS"}*/
/*"U8VEC" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"U8VEC" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"U8VEC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"U8VEC" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"U8VEC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"U8VEC" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"U16VEC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=U16VEC"]
"U16VEC" -> "A1AGG"

```

```

/*"U16VEC" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"U16VEC" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"U16VEC" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INT"; "SINT"; "NNI"; "INS"}*/
/*"U16VEC" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"U16VEC" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"U16VEC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"U16VEC" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"U16VEC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"U16VEC" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

```

"U32VEC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=U32VEC"]

```

"U32VEC" -> "A1AGG"
/*"U32VEC" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"U32VEC" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"U32VEC" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INT"; "SINT"; "NNI"; "INS"}*/
/*"U32VEC" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"U32VEC" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"U32VEC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"U32VEC" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"U32VEC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"U32VEC" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

```

"VECTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=VECTCAT"]

```

"VECTCAT" -> "A1AGG"
/*"VECTCAT" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"VECTCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"VECTCAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "ABELSG"}*/
/*"VECTCAT" -> {"NNI"; "INT"; "ABELMON"; "ABELGRP"; "CABMON"; "MONOID"}*/
/*"VECTCAT" -> {"SGROUP"; "RING"; "RNG"; "LMODULE"; "INS"; "UFD"; "GCDDOM"}*/
/*"VECTCAT" -> {"INTDOM"; "COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"VECTCAT" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"VECTCAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"VECTCAT" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"VECTCAT" -> {"STEP"; "OM"; "PI"; "RADCAT"}*/

```

"VECTCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VECTCAT"]

```

"VECTCAT-" -> "A1AGG"
/*"VECTCAT-" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"VECTCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"VECTCAT-" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"VECTCAT-" -> {"ABELSG"; "NNI"; "INT"; "ABELMON"; "ABELGRP"; "CABMON"}*/
/*"VECTCAT-" -> {"MONOID"; "SGROUP"; "RING"; "RNG"; "LMODULE"; "INS"}*/
/*"VECTCAT-" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"VECTCAT-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"VECTCAT-" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"VECTCAT-" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"VECTCAT-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "PI"; "RADCAT"}*/

```

"XDPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=XDPOLY"]

```

/*"XDPOLY" -> {"FMCAT"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"}*/
/*"XDPOLY" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"XDPOLY" -> {"RMODULE"; "RETRACT"; "MODULE"}*/
"XDPOLY" -> "XPOLYC"
/*"XDPOLY" -> {"XFALG"; "RING"; "RNG"; "SGROUP"; "MONOID"; "XALG"}*/

```

```

/*"XDPOLY" -> {"ALGEBRA"; "ORDMON"; "ORDSET"; "INT"; "LIST"; "ILIST"}*/
/*"XDPOLY" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "COMRING"}*/
/*"XDPOLY" -> {"NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"XDPOLY" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"XDPOLY" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"}*/
/*"XDPOLY" -> "BOOLEAN"*/

"XEXPPKG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=XEXPPKG"]
/*"XEXPPKG" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"XEXPPKG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"XEXPPKG" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "ORDSET"}*/
"XEXPPKG" -> "XPOLYC"
/*"XEXPPKG" -> {"XFALG"; "XALG"; "ALGEBRA"; "RETRACT"; "SINT"; "NNI"}*/
/*"XEXPPKG" -> {"INT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"XEXPPKG" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"XEXPPKG" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "KONVERT"; "LINEXP"}*/
/*"XEXPPKG" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "PI"}*/

"XF" [color="#4488FF",href="bookvol10.2.pdf#nameddest=XF"]
/*"XF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"XF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"XF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"XF" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"XF" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"}*/
"XF" -> "VSPACE"
/*"XF" -> "CHARZ"*/
"XF" -> "FPC"
/*"XF" -> {"CHARNZ"; "FINITE"; "BOOLEAN"; "NNI"; "INT"}*/

"XF-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=XF"]
/*"XF-" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"XF-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"XF-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"XF-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"XF-" -> {"DIVRING"; "RETRACT"}*/
"XF-" -> "VSPACE"
/*"XF-" -> "CHARZ"*/
"XF-" -> "FPC"
/*"XF-" -> {"CHARNZ"; "FINITE"; "BOOLEAN"; "NNI"; "INT"}*/

"XPBWPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=XPBWPOLY"]
"XPBWPOLY" -> "XPOLYC"
/*"XPBWPOLY" -> {"XFALG"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"XPBWPOLY" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"XPBWPOLY" -> {"MONOID"; "LMODULE"; "XALG"; "BMODULE"; "RMODULE"}*/
/*"XPBWPOLY" -> {"ALGEBRA"; "MODULE"; "RETRACT"; "FMCAT"; "COMRING"}*/
/*"XPBWPOLY" -> {"ORDSET"; "INT"; "BOOLEAN"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"XPBWPOLY" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"XPBWPOLY" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"XPBWPOLY" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"}*/
/*"XPBWPOLY" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "INS"; "UFD"}*/
/*"XPBWPOLY" -> {"GCDDOM"; "INTDOM"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"XPBWPOLY" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"XPBWPOLY" -> {"DIFRING"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/

```

```

/*"XPBWPLY" -> {"STEP"; "LNAGG-"; "NNI"; "SINT"}*/

"XPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=XPOLY"]
"XPOLY" -> "XPOLYC"
/*"XPOLY" -> {"XFALG"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"XPOLY" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"XPOLY" -> {"LMODULE"; "XALG"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"XPOLY" -> {"RETRACT"; "COMRING"}*/

"XRPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=XRPOLY"]
"XRPOLY" -> "XPOLYC"
/*"XRPOLY" -> {"XFALG"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"XRPOLY" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"XRPOLY" -> {"LMODULE"; "XALG"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"XRPOLY" -> {"MODULE"; "RETRACT"; "ORDSET"; "BOOLEAN"; "NNI"; "INT"}*/
/*"XRPOLY" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"XRPOLY" -> {"COMRING"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"XRPOLY" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"XRPOLY" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"XRPOLY" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"XRPOLY" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"}*/

```

1.4.11 Layer9

Depends on: BTAGG FLALG LODOCAT MATCAT SRAGG VECTCAT XF PROJSP
PACFFC

Used by next layer: IVECTOR PTCAT STRICAT

— layer9 —

```

LAYER9=\
  ${OUT}/AFFPL.o    ${OUT}/BITS.o    ${OUT}/DFMAT.o    ${OUT}/DFVEC.o    \
  ${OUT}/DIRPROD2.o ${OUT}/IMATRIX.o  ${OUT}/INTRVL.o  \
  ${OUT}/IVECTOR.o  ${OUT}/LOCPOWC.o  \
  ${OUT}/LODO1.o    ${OUT}/LODO2.o    ${OUT}/LPOLY.o    \
  ${OUT}/LSMP.o     ${OUT}/LSMP1.o    ${OUT}/MAMA.o     ${OUT}/MATCAT2.o  \
  ${OUT}/PROJPL.o   ${OUT}/PTCAT.o    ${OUT}/STRICAT.o  ${OUT}/TRIMAT.o  \
  ${OUT}/U8MAT.o    ${OUT}/U16MAT.o   ${OUT}/U32MAT.o  \
layer9done

```

— layerpic —

```

/* layer 9 */
/* Depends on: BTAGG FLALG INTCAT LODOCAT MATCAT SRAGG UPSCAT VECTCAT */
/* AFFSP */

```

```

"AFFPL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AFFPL"]
"AFFPL" -> "AFFSP"

```

```

/*"AFFPL" -> {"AFSPCAT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"}*/
/*"AFFPL" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"AFFPL" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"AFFPL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"AFFPL" -> {"ENTIRER"; "UFD"; "DIVRING"}*/

```

"BITS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BITS"]

```

"BITS" -> "BTAGG"
/*"BITS" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "LOGIC"; "A1AGG"}*/
/*"BITS" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"BITS" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "INT"}*/
/*"BITS" -> {"FINITE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"BITS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"BITS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"BITS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"BITS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"BITS" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"BITS" -> {"STEP"; "OM"}*/

```

"DFMAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DFMAT"]

```

"DFMAT" -> "MATCAT"
"DFMAT" -> "VECTCAT"
/*"DFMAT" -> {"ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DFMAT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "FPS"; "RNS"; "FIELD"}*/
/*"DFMAT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"DFMAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"DFMAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"DFMAT" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DFMAT" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"DFMAT" -> {"RADCAT"; "PATMAB"; "CHARZ"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"DFMAT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "INT"; "DIFRING"; "OM"}*/
/*"DFMAT" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"DFMAT" -> {"SPFCAT"}*/

```

"DFVEC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DFVEC"]

```

"DFVEC" -> "VECTCAT"
/*"DFVEC" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"DFVEC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"DFVEC" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INT"; "SINT"; "NNI"}*/
/*"DFVEC" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"DFVEC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"DFVEC" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DFVEC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"DFVEC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RETRACT"}*/
/*"DFVEC" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"; "OM"; "TRANFUN"}*/
/*"DFVEC" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"DFVEC" -> {"INS"; "OINTDOM"; "LINEXP"; "CFCAT"; "STEP"}*/

```

"DIRPROD2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DIRPROD2"]

```

/*"DIRPROD2" -> "TYPE"*/
"DIRPROD2" -> "VECTCAT"
/*"DIRPROD2" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"DIRPROD2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"DIRPROD2" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/

```



```

"IMATRIX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IMATRIX"]
"IMATRIX" -> "MATCAT"
/*"IMATRIX" -> {"ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"IMATRIX" -> {"KOERCE"; "EVALAB"; "IEVALAB"}*/
"IMATRIX" -> "VECTCAT"
/*"IMATRIX" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"IMATRIX" -> {"CLAGG"; "KONVERT"; "ORDSET"; "RING"; "RNG"; "ABELGRP"}*/
/*"IMATRIX" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IMATRIX" -> {"INT"; "PRIMARR"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"IMATRIX" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"IMATRIX" -> {"ENTIRER"; "FIELD"; "UFD"; "DIVRING"}*/

"INTRVL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INTRVL"]
"INTRVL" -> "INTCAT"
/*"INTRVL" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTRVL" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INTRVL" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INTRVL" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "TRANFUN"}*/
/*"INTRVL" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"}*/
/*"INTRVL" -> {"RETRACT"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"INTRVL" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"INTRVL" -> {"OASGP"; "REAL"; "KONVERT"; "PATMAB"; "CHARZ"; "INT"}*/
/*"INTRVL" -> {"BOOLEAN"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"INTRVL" -> {"FLAGG-"; "URAGG-"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"INTRVL" -> {"CFCAT"; "STEP"; "NNI"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"INTRVL" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"INTRVL" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"IVECTOR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IVECTOR"]
"IVECTOR" -> "VECTCAT"
/*"IVECTOR" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"IVECTOR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"IVECTOR" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "RADCAT"}*/
/*"IVECTOR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IVECTOR" -> {"SGROUP"; "MONOID"; "LMODULE"; "INS"; "UFD"; "GCDDOM"}*/
/*"IVECTOR" -> {"INTDOM"; "COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"IVECTOR" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"IVECTOR" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"IVECTOR" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"LOCPWC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=LOCPWC"]
/*"LOCPWC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"LOCPWC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LOCPWC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"LOCPWC" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"LOCPWC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"LOCPWC" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"LOCPWC" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"LOCPWC" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"LOCPWC" -> {"CHARZ"; "STEP"}*/
"LOCPWC" -> "UPSCAT"
/*"LOCPWC" -> {"PSCAT"; "AMR"; "CHARNZ"; "ELTAB"; "PDRING"}*/

```

```

"LOD01" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LOD01"]
/*"LOD01" -> {"DIFRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LOD01" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LOD01" -> "LMODULE"*/
"LOD01" -> "LODOCAT"
/*"LOD01" -> {"OREPCAT"; "BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"}*/
/*"LOD01" -> {"ALGEBRA"; "MODULE"; "ELTAB"; "FIELD"; "EUCDOM"; "PID"}*/
/*"LOD01" -> {"GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"LOD01" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"LOD01" -> {"OASGP"; "ORDSET"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"LOD01" -> {"REAL"; "CHARZ"; "STEP"}*/

"LOD02" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LOD02"]
"LOD02" -> "LODOCAT"
/*"LOD02" -> {"OREPCAT"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LOD02" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LOD02" -> {"LMODULE"; "BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"}*/
/*"LOD02" -> {"ALGEBRA"; "MODULE"; "ELTAB"; "DIFRING"; "FIELD"; "EUCDOM"}*/
/*"LOD02" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"}*/
/*"LOD02" -> {"DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"LOD02" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "KONVERT"; "LINEXP"}*/
/*"LOD02" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"LPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LPOLY"]
"LPOLY" -> "FLALG"
/*"LPOLY" -> {"LIECAT"; "MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"}*/
/*"LPOLY" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LPOLY" -> {"KOERCE"; "RMODULE"; "FMCAT"; "RETRACT"; "COMRING"}*/
/*"LPOLY" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "ORDSET"; "LSAGG"}*/
/*"LPOLY" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LPOLY" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"LPOLY" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"}*/
/*"LPOLY" -> {"OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"LPOLY" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"LPOLY" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"LPOLY" -> {"BASTYPE-"; "BOOLEAN"; "NNI"; "FIELD"; "EUCDOM"; "PID"}*/
/*"LPOLY" -> {"GCDDOM"; "INTDOM"; "ALGEBRA"; "ENTIRER"; "UFD"; "DIVRING"}*/

"LSMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LSMP"]
/*"LSMP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"LSMP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LSMP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LSMP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LSMP" -> {"UFD"; "DIVRING"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"LSMP" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"LSMP" -> {"KONVERT"; "ORDSET"}*/
"LSMP" -> "MATCAT"
/*"LSMP" -> {"ARR2CAT"; "NNI"; "INT"; "BOOLEAN"; "PRIMARR"; "SINT"}*/
/*"LSMP" -> {"A1AGG"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"LSMP" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"LSMP" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "LIST"; "ILIST"}*/

"LSMP1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LSMP1"]
/*"LSMP1" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/

```

```

/*"LSMP1" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LSMP1" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LSMP1" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LSMP1" -> {"UFD"; "DIVRING"}*/
"LSMP1" -> "VECTCAT"
/*"LSMP1" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"LSMP1" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"LSMP1" -> {"KONVERT"; "ORDSET"}*/

"MAMA" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MAMA"]
/*"MAMA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"MAMA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MAMA" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MAMA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"MAMA" -> {"ENTIRER"; "UFD"; "DIVRING"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"MAMA" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"MAMA" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
"MAMA" -> "MATCAT"
/*"MAMA" -> {"ARR2CAT"; "INT"; "LIST"; "ILIST"; "NNI"; "PI"; "BOOLEAN"}*/
/*"MAMA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"; "LSAGG-"}*/
/*"MAMA" -> {"SINT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"MAMA" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"MAMA" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "MONOID-"; "ABELMON-"}*/
/*"MAMA" -> {"ORDSET-"; "SGROUP-"; "ABELSG-"; "SETCAT-"; "BASTYPE-"}*/
/*"MAMA" -> {"STAGG-"}*/

"MATCAT2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MATCAT2"]
/*"MATCAT2" -> {"RING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MATCAT2" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MATCAT2" -> {"LMODULE"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"MATCAT2" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"MATCAT2" -> {"KONVERT"; "ORDSET"}*/
"MATCAT2" -> "MATCAT"
/*"MATCAT2" -> "ARR2CAT"*/

"PROJPL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PROJPL"]
/*"PROJPL" -> {"PRSPCAT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"}*/
"PROJPL" -> "PROJSP"
/*"PROJPL" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PROJPL" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"PROJPL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PROJPL" -> {"ENTIRER"; "UFD"; "DIVRING"}*/

"PTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PTCAT"]
"PTCAT" -> "VECTCAT"
/*"PTCAT" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PTCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"PTCAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/

"STRICAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=STRICAT"]
"STRICAT" -> "SRAGG"
/*"STRICAT" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"STRICAT" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"STRICAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "OM"}*/

```

```

"TRIMAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TRIMAT"]
/*"TRIMAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"TRIMAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"TRIMAT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"TRIMAT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"TRIMAT" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"TRIMAT" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
"TRIMAT" -> "MATCAT"
/*"TRIMAT" -> {"ARR2CAT"; "INT"; "NNI"; "PI"}*/

"ULSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ULSCAT",
          shape=ellipse]
/*"ULSCAT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ULSCAT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ULSCAT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ULSCAT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"ULSCAT" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ULSCAT" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"ULSCAT" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
"ULSCAT" -> "UPSCAT"
/*"ULSCAT" -> {"PSCAT"; "AMR"; "CHARNZ"; "ELTAB"; "PDRING"; "RADCAT"}*/
/*"ULSCAT" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"ULSCAT" -> {"ELEMFUN"; "FIELD"; "DIVRING"}*/

"U8MAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=U8MAT"]
"U8MAT" -> "MATCAT"
/*"U8MAT" -> {"ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"U8MAT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "INS"; "UFD"; "GCDDOM"}*/
/*"U8MAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"U8MAT" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"U8MAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"U8MAT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"U8MAT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"U8MAT" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"U8MAT" -> {"CHARZ"; "STEP"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"U8MAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "INT"; "OM"; "FIELD"; "DIVRING"}*/

"U16MAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=U16MAT"]
"U16MAT" -> "MATCAT"
/*"U16MAT" -> {"ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"U16MAT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "INS"; "UFD"; "GCDDOM"}*/
/*"U16MAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"U16MAT" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"U16MAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"U16MAT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"U16MAT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"U16MAT" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"U16MAT" -> {"CHARZ"; "STEP"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"U16MAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "INT"; "OM"; "FIELD"; "DIVRING"}*/

"U32MAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=U32MAT"]
"U32MAT" -> "MATCAT"
/*"U32MAT" -> {"ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/

```

```

/*"U32MAT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "INS"; "UFD"; "GCDDOM"}*/
/*"U32MAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"U32MAT" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"U32MAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"U32MAT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"U32MAT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"U32MAT" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"U32MAT" -> {"CHARZ"; "STEP"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"U32MAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "INT"; "OM"; "FIELD"; "DIVRING"}*/

```

1.4.12 Layer10

Depends on: IVECTOR PTCAT STRICAT LOCPOWC

Used by next layer: DIRPCAT FAXF PFECAT STRING

— layer10 —

```

LAYER10=\
  ${OUT}/ASSOCEQ.o  ${OUT}/CARTEN.o  ${OUT}/CLIF.o  ${OUT}/CLIP.o  \
  ${OUT}/COORDSYS.o  ${OUT}/DBASE.o  ${OUT}/DHMATRIX.o  ${OUT}/DIOSP.o  \
  ${OUT}/DIRPCAT.o  ${OUT}/DIRPCAT-.o  ${OUT}/DO2BBFA.o  ${OUT}/DO2BHFA.o  \
  ${OUT}/DO2CJFA.o  ${OUT}/FAXF.o  ${OUT}/FAXF-.o  ${OUT}/FFPOLY2.o  \
  ${OUT}/FNLA.o  ${OUT}/GRAY.o  ${OUT}/HB.o  ${OUT}/INBFF.o  \
  ${OUT}/IRSN.o  ${OUT}/LOP.o  \
  ${OUT}/MCALCFN.o  ${OUT}/MHROWRED.o  ${OUT}/NUMODE.o  \
  ${OUT}/NUMQUAD.o  ${OUT}/ODESYS.o  ${OUT}/ODETOOLS.o  ${OUT}/ORDFUNS.o  \
  ${OUT}/PERMAN.o  ${OUT}/PFECAT.o  ${OUT}/PFECAT-.o  ${OUT}/POINT.o  \
  ${OUT}/PSEUDLIN.o  ${OUT}/PTPACK.o  ${OUT}/REP2.o  ${OUT}/SETMN.o  \
  ${OUT}/SEX.o  ${OUT}/STRING.o  ${OUT}/SYMFUNC.o  ${OUT}/VECTOR2.o  \
layer10done

```

— layerpic —

```

/* layer 10 */
/* depends on: IVECTOR PTCAT STRICAT */

"ASSOCEQ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ASSOCEQ"]
/*"ASSOCEQ" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ASSOCEQ" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ASSOCEQ" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ASSOCEQ" -> {"MODULE"; "ENTIRER"; "LODOCAT"; "OREPCAT"; "FRETRCT"}*/
/*"ASSOCEQ" -> {"RETRACT"; "ELTAB"; "SINT"; "NNI"; "INT"; "VECTCAT"}*/
/*"ASSOCEQ" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"ASSOCEQ" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"ASSOCEQ" -> {"CLAGG"; "KONVERT"; "ORDSET"; "VECTOR"}*/
"ASSOCEQ" -> "IVECTOR"
/*"ASSOCEQ" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "LIST"; "ILIST"; "PI"}*/
/*"ASSOCEQ" -> {"BOOLEAN"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/

```

```

/*"ASSOCEQ" -> {"UFD"; "DIVRING"}*/

"CARTEN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CARTEN"]
/*"CARTEN" -> {"GRALG"; "GRMOD"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"CARTEN" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "ABELMON"}*/
/*"CARTEN" -> {"ABELSG"; "CABMON"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"CARTEN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"}*/
/*"CARTEN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"CARTEN" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"CARTEN" -> {"DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"CARTEN" -> {"CHARZ"; "STEP"; "NNI"; "INT"; "MONOID-"; "ABELMON-"}*/
/*"CARTEN" -> {"ORDSET-"; "SGROUP-"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"CARTEN" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"CARTEN" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "VECTOR"}*/
"CARTEN" -> "IVECTOR"
/*"CARTEN" -> {"IARRAY1"; "SINT"; "PI"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"CARTEN" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"CARTEN" -> {"MODULE-"; "RING-"; "ABELGRP-"; "BOOLEAN"; "LSAGG"}*/
/*"CARTEN" -> {"STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"CARTEN" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"CARTEN" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "AGG-"}*/
/*"CARTEN" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/

"CLIF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CLIF"]
/*"CLIF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"CLIF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CLIF" -> {"ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "VSPACE"}*/
/*"CLIF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"CLIF" -> {"COMRING"; "ENTIRER"; "UFD"; "DIVRING"; "SINT"; "PI"}*/
/*"CLIF" -> {"NNI"; "INT"; "MONOID-"; "ABELSG-"; "SGROUP-"; "PRIMARR"}*/
/*"CLIF" -> {"BOOLEAN"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"CLIF" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"CLIF" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INS-"; "LIST"; "ILIST"}*/
/*"CLIF" -> {"LSAGG-"; "STAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"CLIF" -> {"ELAGG"; "OM"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"CLIF" -> {"RCAGG-"; "IXAGG-"; "VECTOR"; "VECTCAT"}*/
"CLIF" -> "IVECTOR"
/*"CLIF" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"}*/

"CLIP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CLIP"]
/*"CLIP" -> {"DFLOAT"; "FPS-"; "RNS-"; "FIELD-"; "EUCDOM-"; "UFD-"}*/
/*"CLIP" -> {"GCDDOM-"; "DIVRING-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"CLIP" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/
/*"CLIP" -> {"MONOID-"; "ORDSET-"; "ABELSG-"; "SGROUP-"; "TRANFUN-"}*/
/*"CLIP" -> {"SETCAT-"; "ELEMFUN-"; "HYPCAT-"; "ATRIG-"; "TRIGCAT-"}*/
/*"CLIP" -> {"RADCAT-"; "RETRACT-"; "BASTYPE-"; "FPS"; "RNS"}*/
/*"CLIP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"CLIP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CLIP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"CLIP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"CLIP" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"CLIP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"CLIP" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
"CLIP" -> "PTCAT"

```

```

/*"CLIP" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"CLIP" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"CLIP" -> {"CLAGG"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"}*/
/*"CLIP" -> {"STEP"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"CLIP" -> {"STAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/
/*"CLIP" -> {"ELAGG-"; "FLAGG-"; "INS-"; "PI"; "NNI"; "SINT"}*/
/*"CLIP" -> {"BOOLEAN"; "URAGG-"}*/

"COORDSYS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COORDSYS"]
/*"COORDSYS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"COORDSYS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"COORDSYS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"COORDSYS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"COORDSYS" -> {"ENTIRER"; "UFD"; "DIVRING"; "TRANFUN"; "TRIGCAT"}*/
/*"COORDSYS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"}*/
/*"COORDSYS" -> {"INT"; "PI"; "NNI"}*/
"COORDSYS" -> "PTCAT"
/*"COORDSYS" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"COORDSYS" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"COORDSYS" -> {"CLAGG"; "KONVERT"; "ORDSET"}*/

"DBASE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DBASE"]
/*"DBASE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDSET"}*/
"DBASE" -> "STRICAT"
/*"DBASE" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"DBASE" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"DBASE" -> {"CLAGG"; "KONVERT"; "OM"; "INT"; "LIST"; "ILIST"}*/
/*"DBASE" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "LSAGG"; "STAGG"}*/
/*"DBASE" -> {"URAGG"; "RCAGG"; "ELAGG"; "NNI"; "SINT"; "PI"}*/

"DHMATRIX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DHMATRIX"]
/*"DHMATRIX" -> {"MATCAT"; "ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"DHMATRIX" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "FIELD"}*/
/*"DHMATRIX" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DHMATRIX" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"DHMATRIX" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"DHMATRIX" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "VECTCAT"; "A1AGG"}*/
/*"DHMATRIX" -> {"FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"DHMATRIX" -> {"KONVERT"; "ORDSET"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"DHMATRIX" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "INT"; "VECTOR"}*/
"DHMATRIX" -> "IVECTOR"
/*"DHMATRIX" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"}*/

"DIOSP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DIOSP"]
/*"DIOSP" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"DIOSP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"DIOSP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"DIOSP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"DIOSP" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"DIOSP" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"DIOSP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "NNI"}*/
/*"DIOSP" -> {"INT"; "LIST"; "ILIST"; "OAMONS"; "VECTOR"}*/
"DIOSP" -> "IVECTOR"
/*"DIOSP" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/

```

```

/*"DIOSP" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"DIOSP" -> {"BASTYPE-"; "BOOLEAN"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"DIOSP" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"DIOSP" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "SINT"; "OM"}*/

"DIRPCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DIRPCAT"]
/*"DIRPCAT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DIRPCAT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DIRPCAT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DIRPCAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"DIRPCAT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DIRPCAT" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"DIRPCAT" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"DIRPCAT" -> {"STEP"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"DIRPCAT" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"; "DIFEXT"; "PDRING"}*/
/*"DIRPCAT" -> {"FLINEXP"; "FINITE"; "OAMONS"; "VSPACE"; "FIELD"; "DIVRING"}*/
/*"DIRPCAT" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "CLAGG"; "INT"}*/
/*"DIRPCAT" -> "VECTOR"*/
"DIRPCAT" -> "IVECTOR"
/*"DIRPCAT" -> {"IARRAY1"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"DIRPCAT" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"; "VECTCAT-"}*/
/*"DIRPCAT" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"DIRPCAT" -> {"ORDSET-"; "AGG-"}*/

"DIRPCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIRPCAT"]
/*"DIRPCAT-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DIRPCAT-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DIRPCAT-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DIRPCAT-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"DIRPCAT-" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"DIRPCAT-" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"DIRPCAT-" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"DIRPCAT-" -> {"REAL"; "CHARZ"; "STEP"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"DIRPCAT-" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"}*/
/*"DIRPCAT-" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "FINITE"; "OAMONS"; "VSPACE"}*/
/*"DIRPCAT-" -> {"FIELD"; "DIVRING"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"DIRPCAT-" -> {"CLAGG"; "INT"; "VECTOR"}*/
"DIRPCAT-" -> "IVECTOR"
/*"DIRPCAT-" -> {"IARRAY1"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"DIRPCAT-" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"; "VECTCAT-"}*/
/*"DIRPCAT-" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"DIRPCAT-" -> {"ORDSET-"; "AGG-"}*/

"D02BBFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D02BBFA"]
/*"D02BBFA" -> {"ODECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
/*"D02BBFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"D02BBFA" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"D02BBFA" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"D02BBFA" -> {"OM"; "LIST"; "ILIST"; "DFLOAT"; "FPS-"; "RNS-"}*/
/*"D02BBFA" -> {"FIELD-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"}*/
/*"D02BBFA" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "FPS"; "RNS"}*/
/*"D02BBFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"D02BBFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"D02BBFA" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/

```



```

/*"D02BBFA" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"D02BBFA" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"D02BBFA" -> {"REAL"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "VECTCAT"}*/
/*"D02BBFA" -> {"A1AGG"; "VECTOR"}*/
"D02BBFA" -> "IVECTOR"
/*"D02BBFA" -> {"IARRAY1"; "PI"}*/

"D02BHFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D02BHFA"]
/*"D02BHFA" -> {"ODECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
/*"D02BHFA" -> {"DFLOAT"; "FPS-"; "RNS-"; "FIELD-"; "EUCDOM-"; "UFD-"}*/
/*"D02BHFA" -> {"GCDDOM-"; "DIVRING-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"D02BHFA" -> {"ORDRING-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"D02BHFA" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"D02BHFA" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"D02BHFA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"D02BHFA" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D02BHFA" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"D02BHFA" -> {"RADCAT"; "PATMAB"; "CHARZ"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"D02BHFA" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"D02BHFA" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "VECTOR"}*/
"D02BHFA" -> "IVECTOR"
/*"D02BHFA" -> {"IARRAY1"; "PI"}*/

"D02CJFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D02CJFA"]
/*"D02CJFA" -> {"ODECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"}*/
/*"D02CJFA" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"D02CJFA" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"D02CJFA" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"}*/
/*"D02CJFA" -> {"ELAGG"; "OM"; "DFLOAT"; "FPS-"; "RNS-"; "FIELD-"}*/
/*"D02CJFA" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"; "INTDOM-"}*/
/*"D02CJFA" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "FPS"; "RNS"; "FIELD"}*/
/*"D02CJFA" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"D02CJFA" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"D02CJFA" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"D02CJFA" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"D02CJFA" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "RETRACT"; "RADCAT"}*/
/*"D02CJFA" -> {"PATMAB"; "CHARZ"; "VECTCAT"; "A1AGG"; "VECTOR"}*/
"D02CJFA" -> "IVECTOR"
/*"D02CJFA" -> "IARRAY1"*/

"FAXF" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FAXF"]
/*"FAXF" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FAXF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FAXF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FAXF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"FAXF" -> {"DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*"FAXF" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "SINT"; "PI"}*/
/*"FAXF" -> {"NNI"; "INT"; "VECTOR"}*/
"FAXF" -> "IVECTOR"
/*"FAXF" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"FAXF" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FAXF" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INS"; "OINTDOM"}*/
/*"FAXF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "LINEXP"}*/
/*"FAXF" -> {"PATMAB"; "CFCAT"; "REAL"; "OM"; "BOOLEAN"; "VECTCAT-"}*/

```

```

/*"FAXF" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "LIST"; "ILIST"}*/
/*"FAXF" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "MONOID-"; "ABELMON-"}*/
/*"FAXF" -> {"ORDSET-"; "SGROUP-"; "INS-"}*/

"FAXF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FAXF"]
/*"FAXF" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FAXF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FAXF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FAXF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"FAXF" -> {"DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*"FAXF" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "SINT"; "PI"}*/
/*"FAXF" -> {"NNI"; "INT"; "VECTOR"}*/
"FAXF" -> "IVECTOR"
/*"FAXF" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"FAXF" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FAXF" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INS"; "OINTDOM"}*/
/*"FAXF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "LINEXP"}*/
/*"FAXF" -> {"PATMAB"; "CFCAT"; "REAL"; "OM"; "BOOLEAN"; "VECTCAT-"}*/
/*"FAXF" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "LIST"; "ILIST"}*/
/*"FAXF" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "MONOID-"; "ABELMON-"; "ORDSET-"}*/
/*"FAXF" -> {"SGROUP-"; "INS-"}*/

"FFPOLY2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFPOLY2"]
/*"FFPOLY2" -> {"FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFPOLY2" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFPOLY2" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFPOLY2" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFPOLY2" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FFIELDC"; "FINITE"}*/
/*"FFPOLY2" -> {"STEP"; "DIFRING"; "NNI"; "INT"; "PI"; "VECTOR"}*/
"FFPOLY2" -> "IVECTOR"
/*"FFPOLY2" -> {"IARRAY1"; "PRIMARR"; "SINT"; "MONOID-"; "ABELMON-"}*/

"FNLA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FNLA"]
/*"FNLA" -> {"NAALG"; "NARNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FNLA" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"; "MODULE"; "BMODULE"}*/
/*"FNLA" -> {"LMODULE"; "RMODULE"; "COMRING"; "RING"; "RNG"; "SGROUP"}*/
/*"FNLA" -> {"MONOID"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"FNLA" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FNLA" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INT"; "VECTOR"}*/
"FNLA" -> "IVECTOR"
/*"FNLA" -> {"IARRAY1"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "PI"; "NNI"}*/

"GRAY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GRAY"]
/*"GRAY" -> {"INT"; "VECTOR"}*/
"GRAY" -> "IVECTOR"
/*"GRAY" -> {"IARRAY1"; "PI"; "NNI"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"GRAY" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"GRAY" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"GRAY" -> {"CLAGG"; "KONVERT"; "ORDSET"; "SINT"}*/

"HB" [color="#FF4488",href="bookvol10.4.pdf#nameddest=HB"]
/*"HB" -> {"INT"; "SINT"; "NNI"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"HB" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
/*"HB" -> {"RING-"; "ABELGRP-"; "BOOLEAN"; "VECTOR"}*/

```

```

"HB" -> "IVECTOR"
/*"HB" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"HB" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"HB" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"HB" -> {"ORDSET"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/

"INBFF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INBFF"]
/*"INBFF" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"INBFF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"INBFF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"INBFF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"INBFF" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*"INBFF" -> {"STEP"; "DIFRING"; "NNI"; "INT"; "LIST"; "VECTOR"}*/
"INBFF" -> "IVECTOR"
/*"INBFF" -> {"IARRAY1"; "SINT"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"INBFF" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"INBFF" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "PI"}*/
/*"INBFF" -> {"VECTCAT-"; "MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"}*/
/*"INBFF" -> {"A1AGG-"; "ILIST"; "LSAGG-"; "STAGG-"; "BOOLEAN"; "INS-"}*/
/*"INBFF" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"INBFF" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"INBFF" -> {"ELAGG-"; "FLAGG-"; "URAGG-"}*/

"IRSN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IRSN"]
/*"IRSN" -> {"INT"; "LIST"; "NNI"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"IRSN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"IRSN" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"IRSN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"IRSN" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"IRSN" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"IRSN" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"IRSN" -> {"STEP"; "SINT"; "PI"; "OM"; "ILIST"; "LSAGG"}*/
/*"IRSN" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"IRSN" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"IRSN" -> {"CLAGG"; "FLAGG"; "ELAGG"; "LSAGG-"; "STAGG-"; "BOOLEAN"}*/
/*"IRSN" -> "VECTOR"*/
"IRSN" -> "IVECTOR"
/*"IRSN" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FINITE"; "LOGIC"; "VECTCAT-"}*/
/*"IRSN" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"IRSN" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/

"LOP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LOP"]
/*"LOP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"LOP" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"LOP" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"LOP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"LOP" -> {"PACPERC"; "INT"; "LIST"; "ILIST"; "VECTOR"}*/
"LOP" -> "IVECTOR"
/*"LOP" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"LOP" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LOP" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"LOP" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"; "LSAGG-"}*/
/*"LOP" -> {"BOOLEAN"; "STAGG-"; "NNI"; "SINT"}*/

```

```

"MCALCFN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MCALCFN"]
/*"MCALCFN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "PDRING"; "RING"; "RNG"}*/
/*"MCALCFN" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"MCALCFN" -> {"LMODULE"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"MCALCFN" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"MCALCFN" -> {"KONVERT"; "ORDSET"; "INT"; "VECTOR"; "LSAGG"; "STAGG"}*/
/*"MCALCFN" -> {"URAGG"; "RCAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"}*/
/*"MCALCFN" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"MCALCFN" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"MCALCFN" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"MCALCFN" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"MCALCFN" -> {"REAL"; "CHARZ"; "STEP"}*/
"MCALCFN" -> "IVECTOR"
/*"MCALCFN" -> {"IARRAY1"; "NNI"; "SINT"; "PI"; "LSAGG-"; "STAGG-"}*/

"MHROWRED" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MHROWRED"]
/*"MHROWRED" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"MHROWRED" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"MHROWRED" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MHROWRED" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"MHROWRED" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"MHROWRED" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"MHROWRED" -> {"CLAGG"; "KONVERT"; "ORDSET"; "INT"; "VECTOR"}*/
"MHROWRED" -> "IVECTOR"
/*"MHROWRED" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "BOOLEAN"; "INS"; "UFD"}*/
/*"MHROWRED" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"MHROWRED" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"MHROWRED" -> {"CHARZ"; "STEP"; "OM"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"MHROWRED" -> {"RCAGG"; "ELAGG"; "LIST"; "ILIST"; "SINT"; "NNI"}*/
/*"MHROWRED" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "INS-"; "PI"; "FIELD"}*/
/*"MHROWRED" -> "DIVRING"*/

"NUMODE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NUMODE"]
/*"NUMODE" -> {"NNI"; "INT"; "VECTOR"}*/
"NUMODE" -> "IVECTOR"
/*"NUMODE" -> {"IARRAY1"; "PI"; "SINT"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"NUMODE" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"NUMODE" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"NUMODE" -> {"CLAGG"; "KONVERT"; "ORDSET"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"NUMODE" -> {"RCAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"NUMODE" -> {"STAGG-"; "VECTCAT-"; "A1AGG-"}*/

"NUMQUAD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NUMQUAD"]
/*"NUMQUAD" -> "NNI"*/
/*"NUMQUAD" -> {"PI"; "BOOLEAN"; "SINT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"NUMQUAD" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"NUMQUAD" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"NUMQUAD" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"NUMQUAD" -> {"OM"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "VECTOR"}*/
"NUMQUAD" -> "IVECTOR"
/*"NUMQUAD" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"NUMQUAD" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"NUMQUAD" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "VECTCAT-"}*/
/*"NUMQUAD" -> "A1AGG-"/>

```

```

"ODESYS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODESYS"]
/*"ODESYS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODESYS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODESYS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ODESYS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ODESYS" -> {"UFD"; "DIVRING"; "LODOCAT"; "OREPCAT"; "FRETRCT"; "RETRACT"}*/
/*"ODESYS" -> {"ELTAB"; "INT"; "LIST"; "ILIST"; "NNI"; "VECTOR"}*/
"ODESYS" -> "IVECTOR"
/*"ODESYS" -> {"IARRAY1"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"ODESYS" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"ODESYS" -> {"ELTAGG"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"ODESYS" -> {"OM"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"ODESYS" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "VECTCAT"; "A1AGG"}*/
/*"ODESYS" -> {"SINT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ODESYS" -> {"OAMON"; "OASGP"; "DIFRING"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"ODESYS" -> {"REAL"; "CHARZ"; "STEP"; "BOOLEAN"; "VECTCAT-"; "A1AGG-"}*/

"ODETOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODETOOLS"]
/*"ODETOOLS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODETOOLS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODETOOLS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ODETOOLS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ODETOOLS" -> {"ENTIRER"; "UFD"; "DIVRING"; "LODOCAT"; "OREPCAT"}*/
/*"ODETOOLS" -> {"FRETRCT"; "RETRACT"; "ELTAB"; "LSAGG"; "STAGG"}*/
/*"ODETOOLS" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"ODETOOLS" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
/*"ODETOOLS" -> {"FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"ODETOOLS" -> {"ILIST"; "VECTOR"; "VECTCAT"; "A1AGG"}*/
"ODETOOLS" -> "IVECTOR"
/*"ODETOOLS" -> {"IARRAY1"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"ODETOOLS" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "LINEXP"; "PATMAB"}*/
/*"ODETOOLS" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"ORDFUNS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ORDFUNS"]
/*"ORDFUNS" -> {"OAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
/*"ORDFUNS" -> {"KOERCE"; "ABELMON"; "ABELSG"; "SINT"; "NNI"; "INT"}*/
/*"ORDFUNS" -> "VECTOR"*/
"ORDFUNS" -> "IVECTOR"
/*"ORDFUNS" -> {"IARRAY1"; "BOOLEAN"}*/

"PERMAN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PERMAN"]
/*"PERMAN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PERMAN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PERMAN" -> {"LMODULE"; "INT"; "VECTOR"}*/
"PERMAN" -> "IVECTOR"
/*"PERMAN" -> {"IARRAY1"; "PI"; "NNI"; "BOOLEAN"; "SINT"; "VECTCAT"}*/
/*"PERMAN" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PERMAN" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"PERMAN" -> {"ORDSET"; "INTDOM"; "COMRING"; "BMODULE"; "RMODULE"}*/
/*"PERMAN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"}*/

"PFECAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PFECAT"]
/*"PFECAT" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/

```

```

/*"PFECAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PFECAT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PFECAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PFECAT" -> {"CHARNZ"; "INT"; "VECTOR"}*/
"PFECAT" -> "IVECTOR"
/*"PFECAT" -> {"IARRAY1"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/

"PFECAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PFECAT"]
/*"PFECAT-" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PFECAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PFECAT-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PFECAT-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PFECAT-" -> {"CHARNZ"; "INT"; "VECTOR"}*/
"PFECAT-" -> "IVECTOR"
/*"PFECAT-" -> {"IARRAY1"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/

"POINT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=POINT"]
"POINT" -> "PTCAT"
/*"POINT" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"POINT" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"POINT" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"POINT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"POINT" -> {"SGROUP"; "MONOID"; "LMODULE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"POINT" -> {"RCAGG"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
/*"POINT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"POINT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"POINT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"POINT" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"POINT" -> {"CHARZ"; "STEP"; "NNI"; "PI"; "RADCAT"}*/

"PSEUDLIN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PSEUDLIN"]
/*"PSEUDLIN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PSEUDLIN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PSEUDLIN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PSEUDLIN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PSEUDLIN" -> {"ENTIRER"; "UFD"; "DIVRING"; "INT"; "LIST"}*/
/*"PSEUDLIN" -> {"ILIST"; "BOOLEAN"; "NNI"; "VECTOR"}*/
"PSEUDLIN" -> "IVECTOR"
/*"PSEUDLIN" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"PSEUDLIN" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PSEUDLIN" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "SINT"}*/

"PTPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PTPACK"]
/*"PTPACK" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PTPACK" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PTPACK" -> {"LMODULE"; "INT"}*/
"PTPACK" -> "PTCAT"
/*"PTPACK" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"PTPACK" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"PTPACK" -> {"CLAGG"; "KONVERT"; "ORDSET"; "NNI"}*/

"REP2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REP2"]
/*"REP2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"REP2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/

```

```

/*"REP2" -> {"SINT"; "NNI"; "INT"; "PI"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"REP2" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"REP2" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "VECTOR"}*/
"REP2" -> "IVECTOR"
/*"REP2" -> {"IARRAY1"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"REP2" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "EUCDOM"}*/
/*"REP2" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"; "RMODULE"}*/
/*"REP2" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "VECTCAT-"; "A1AGG-"; "FLAGG-"}*/
/*"REP2" -> {"LNAGG-"; "IXAGG-"; "INS"; "UFD"; "OINTDOM"; "ORDRING"}*/
/*"REP2" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"REP2" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"REP2" -> {"ELAGG-"; "URAGG-"; "FIELD"; "DIVRING"; "MATCAT"; "ARR2CAT"}*/
/*"REP2" -> "FINITE"*/

"SETMN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SETMN"]
/*"SETMN" -> {"FINITE"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "VECTOR"}*/
"SETMN" -> "IVECTOR"
/*"SETMN" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"SETMN" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"SETMN" -> {"BASTYPE-"; "NNI"; "PI"; "SINT"; "LIST"; "ILIST"}*/
/*"SETMN" -> {"BOOLEAN"; "BTAGG"; "ORDSET"; "LOGIC"; "A1AGG"; "FLAGG"}*/
/*"SETMN" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"SETMN" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "LSAGG"}*/
/*"SETMN" -> {"STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"}*/

"SEX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SEX"]
/*"SEX" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INS"; "UFD"; "GCDDOM"}*/
/*"SEX" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SEX" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"SEX" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"SEX" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SEX" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"SEX" -> {"REAL"; "CHARZ"; "STEP"; "FPS"; "RNS"; "FIELD"}*/
/*"SEX" -> {"DIVRING"; "RADCAT"; "SEXCAT"}*/
"SEX" -> "STRICAT"
/*"SEX" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"SEX" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"SEX" -> {"CLAGG"; "OM"}*/

"STRING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=STRING"]
"STRING" -> "STRICAT"
/*"STRING" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"STRING" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"STRING" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"STRING" -> {"OM"; "INT"; "ORDFIN"; "FINITE"; "INS"; "UFD"}*/
/*"STRING" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"STRING" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"STRING" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"STRING" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"STRING" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"STRING" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"SYMBOL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SYMBOL",
          shape=ellipse]

```

```

/*"SYMBOL" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"; "OM"}*/
/*"SYMBOL" -> {"PATMAB"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"SYMBOL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SYMBOL" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SYMBOL" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"SYMBOL" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SYMBOL" -> {"DIFRING"; "RETRACT"; "LINEXP"; "CFCAT"; "REAL"}*/
/*"SYMBOL" -> {"CHARZ"; "STEP"; "FPS"; "RNS"; "FIELD"; "DIVRING"}*/
/*"SYMBOL" -> {"RADCAT"; "INT"; "PRIMARR"; "A1AGG-"; "SYMBOL"; "REF"}*/
/*"SYMBOL" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"SYMBOL" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
"SYMBOL" -> "STRICAT"
/*"SYMBOL" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"SYMBOL" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"SYMBOL" -> {"CLAGG"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/
/*"SYMBOL" -> {"ILIST"; "NNI"; "BOOLEAN"; "LSAGG-"; "STAGG-"; "ORDFIN"}*/
/*"SYMBOL" -> {"FINITE"; "ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"SYMBOL" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"SYMBOL" -> "BASTYPE-"/>

```

"SYMFUNC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SYMFUNC"]

```

/*"SYMFUNC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SYMFUNC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SYMFUNC" -> {"PI"; "NNI"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"SYMFUNC" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"SYMFUNC" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"SYMFUNC" -> {"ORDSET"; "ELAGG"; "OM"; "LIST"; "ILIST"; "INS"}*/
/*"SYMFUNC" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"; "RMODULE"}*/
/*"SYMFUNC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"SYMFUNC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SYMFUNC" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"SYMFUNC" -> {"CHARZ"; "STEP"; "VECTOR"}*/
"SYMFUNC" -> "IVECTOR"
/*"SYMFUNC" -> {"IARRAY1"; "SINT"; "VECTCAT"; "A1AGG"; "MONOID-"}*/
/*"SYMFUNC" -> {"ABELMON-"; "VECTCAT-"; "A1AGG-"}*/

```

"UPOLYC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=UPOLYC",
shape=ellipse]

```

/*"UPOLYC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPOLYC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UPOLYC" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"UPOLYC" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"UPOLYC" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"UPOLYC" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"UPOLYC" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"UPOLYC" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"UPOLYC" -> {"NNI"; "INT"; "LIST"; "ILIST"; "VECTOR"}*/
"UPOLYC" -> "IVECTOR"
/*"UPOLYC" -> {"IARRAY1"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"UPOLYC" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"; "VECTCAT"}*/
/*"UPOLYC" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"UPOLYC" -> {"TYPE"; "ELTAGG"; "CLAGG"; "PI"; "BOOLEAN"}*/

```

"UPOLYC-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UPOLYC",


```

        shape=ellipse]
/*"UPOLYC-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPOLYC-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"UPOLYC-" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"UPOLYC-" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"UPOLYC-" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"UPOLYC-" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"UPOLYC-" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"}*/
/*"UPOLYC-" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"UPOLYC-" -> {"EUCDDOM"; "PID"; "FIELD"; "DIVRING"; "NNI"; "INT"}*/
/*"UPOLYC-" -> {"LIST"; "ILIST"; "VECTOR"}*/
"UPOLYC-" -> "IVECTOR"
/*"UPOLYC-" -> {"IARRAY1"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"UPOLYC-" -> {"OCAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"}*/
/*"UPOLYC-" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"UPOLYC-" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "PI"; "BOOLEAN"}*/

"VECTOR2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=VECTOR2"]
/*"VECTOR2" -> {"TYPE"; "TYPE"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"VECTOR2" -> {"IXAGG"; "HOAGG"; "AGG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"VECTOR2" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"VECTOR2" -> {"ORDSET"; "INT"; "VECTOR"}*/
"VECTOR2" -> "IVECTOR"
/*"VECTOR2" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"}*/
/*"VECTOR2" -> {"IXAGG-"; "LIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"VECTOR2" -> {"ELAGG"; "OM"; "ILIST"}*/

```

1.4.13 Layer11

Depends on: DIRPCAT FAXF PFECAT STRING LOP

Used by next layer: DIOPS DPOLCAT FINRALG FRAC RMACAT RRCC UPXSCAT

— layer11 —

```

LAYER11=\
${OUT}/ASP1.o      ${OUT}/ASP10.o    ${OUT}/ASP24.o    ${OUT}/ASP4.o    \
${OUT}/ASP50.o     ${OUT}/ASP6.o      ${OUT}/ASP73.o    ${OUT}/AXSERV.o  \
${OUT}/BALFACT.o   ${OUT}/BEZOUT.o    ${OUT}/BINARY.o   ${OUT}/BINFILE.o \
${OUT}/BOUNDZRO.o  ${OUT}/BPADICRT.o   ${OUT}/BRILL.o    ${OUT}/CADU.o    \
${OUT}/CDEN.o      \
${OUT}/CHVAR.o     ${OUT}/COMMUPC.o  ${OUT}/CONTFRAC.o ${OUT}/CVMP.o    \
${OUT}/CYCLOTOM.o  ${OUT}/CYCLES.o    ${OUT}/DDFACT.o   ${OUT}/DECIMAL.o \
${OUT}/DIOPS.o     ${OUT}/DIOPS-.o    ${OUT}/DIRPROD.o  ${OUT}/DISPLAY.o \
${OUT}/DMP.o       ${OUT}/DPMO.o     ${OUT}/DPOLCAT.o  ${OUT}/DPOLCAT-.o \
${OUT}/DSTREE.o    \
${OUT}/DO1AJFA.o   ${OUT}/DO1AKFA.o  ${OUT}/DO1ALFA.o  ${OUT}/DO1AMFA.o \
${OUT}/DO1APFA.o   ${OUT}/DO1AQFA.o  ${OUT}/EMR.o       ${OUT}/EQ.o       \
${OUT}/ERROR.o     ${OUT}/EVALCYC.o   ${OUT}/EXP3D.o    \
${OUT}/E04DGFA.o   ${OUT}/E04FDFA.o   \
${OUT}/E04GCFA.o   ${OUT}/E04JFA.o    ${OUT}/E04UCFA.o  ${OUT}/FACUTIL.o \
${OUT}/FF.o        ${OUT}/FFFACTOR.o \

```

```

${OUT}/FFCG.o      ${OUT}/FFCGX.o      ${OUT}/FFFG.o      \
${OUT}/FFFGF.o     ${OUT}/FFHOM.o     ${OUT}/FFNB.o      ${OUT}/FFNBX.o     \
${OUT}/FFPOLY.o    ${OUT}/FFSQFR.o    \
${OUT}/FFX.o       ${OUT}/FFSLPE.o    ${OUT}/FGLMICPK.o  \
${OUT}/FILE.o      ${OUT}/FINAALG.o    ${OUT}/FINAALG-.o  ${OUT}/FINRALG.o   \
${OUT}/FINRALG-.o  ${OUT}/FFF.o       ${OUT}/FLOATRP.o   ${OUT}/FNAME.o     \
${OUT}/FOP.o       ${OUT}/FORMULA.o    ${OUT}/FORT.o      ${OUT}/FRAC.o       \
${OUT}/FTEM.o      ${OUT}/GENEEZ.o    ${OUT}/GENMFACT.o  ${OUT}/GENPGCD.o   \
${OUT}/GALFACTU.o  ${OUT}/GALPOLYU.o  ${OUT}/GB.o        ${OUT}/GBEUCLID.o  \
${OUT}/GBF.o       ${OUT}/GBINTERN.o  ${OUT}/GHENSEL.o   ${OUT}/GMODPOL.o   \
${OUT}/GOSPER.o    ${OUT}/GRAPHVIZ.o  \
${OUT}/GRIMAGE.o   ${OUT}/GROEBSOL.o  ${OUT}/HDMP.o      \
${OUT}/HDP.o       ${OUT}/HEXADEC.o    ${OUT}/HEUGCD.o    ${OUT}/HTMLFORM.o  \
${OUT}/IBPTOOLS.o  \
${OUT}/IFF.o       ${OUT}/IBITS.o      ${OUT}/ICARD.o     ${OUT}/ICDEN.o     \
${OUT}/IDECOMP.o   ${OUT}/IIARRAY2.o  ${OUT}/IMATLIN.o   ${OUT}/IMATQF.o     \
${OUT}/INMODGCD.o  ${OUT}/INNMFAC.o   ${OUT}/INPSIGN.o   ${OUT}/INTERGB.o   \
${OUT}/INTHERTR.o  \
${OUT}/INTRAT.o    ${OUT}/INTRF.o      ${OUT}/INTSLPE.o   ${OUT}/INTTR.o     \
${OUT}/ISUMP.o     ${OUT}/LAUPOL.o    ${OUT}/LEADCDET.o  ${OUT}/LGROBP.o    \
${OUT}/LIMITRF.o   ${OUT}/LINDEP.o    ${OUT}/LISYSER.o   \
${OUT}/LO.o        ${OUT}/LPEFRAC.o    \
${OUT}/LSPP.o      ${OUT}/MATLIN.o    ${OUT}/MCDEN.o     ${OUT}/MDDFACT.o   \
${OUT}/MFINFACT.o  ${OUT}/MFLOAT.o    ${OUT}/MINT.o      ${OUT}/MLIFT.o      \
${OUT}/MMAP.o      ${OUT}/MODMON.o    ${OUT}/MONOTOOL.o  ${OUT}/MPCPF.o      \
${OUT}/MPC2.o      ${OUT}/MPC3.o      ${OUT}/MPOLY.o     ${OUT}/MPRFF.o      \
${OUT}/MRATFAC.o   ${OUT}/MULTSQFR.o   ${OUT}/NORMRETR.o  ${OUT}/NPCOEF.o     \
${OUT}/NSUP.o      ${OUT}/NTPOLFN.o   ${OUT}/ODP.o       ${OUT}/ODEPRIM.o    \
${OUT}/ODEPRRIC.o  ${OUT}/OMPKG.o      ${OUT}/OMSERVER.o  ${OUT}/PACRATC.o    \
${OUT}/PADEPAC.o   \
${OUT}/PADICRAT.o  ${OUT}/PADICRC.o    ${OUT}/PARAMP.o    \
${OUT}/PCOMP.o     ${OUT}/PDECOMP.o    \
${OUT}/PF.o        ${OUT}/PFBR.o      ${OUT}/PFBRU.o     ${OUT}/PFORP.o      \
${OUT}/PFOTOOLS.o  \
${OUT}/PFRPAC.o    ${OUT}/PGCD.o      ${OUT}/PINTERPA.o  ${OUT}/PLEQN.o      \
${OUT}/PLPKCRV.o   \
${OUT}/PMPLCAT.o   ${OUT}/PMQFCAT.o    ${OUT}/PNTHEORY.o  ${OUT}/POLUTIL.o    \
${OUT}/POLTOPOL.o  ${OUT}/POLYCATQ.o   ${OUT}/POLYLIFT.o  ${OUT}/POLYROOT.o   \
${OUT}/POLY2.o     ${OUT}/POLY2UP.o    ${OUT}/PRS.o       ${OUT}/PSQFR.o      \
${OUT}/PUSHVAR.o   ${OUT}/QALGSET.o    ${OUT}/QFCAT2.o    ${OUT}/RADIX.o      \
${OUT}/RATFACT.o   ${OUT}/RCFIELD.o    ${OUT}/RCFIELD-.o  ${OUT}/RDETR.o      \
${OUT}/RDETRS.o    ${OUT}/REALO.o     ${OUT}/REALOQ.o    ${OUT}/REALSOLV.o   \
${OUT}/RESRING.o   ${OUT}/RETSOL.o     ${OUT}/RF.o        ${OUT}/RFFACTOR.o   \
${OUT}/RINTERP.o   ${OUT}/RMATCAT.o    ${OUT}/RMATCAT-.o  ${OUT}/RRCC.o       \
${OUT}/RRCC-.o     ${OUT}/SCPKG.o      ${OUT}/SHDP.o      ${OUT}/SHP.o        \
${OUT}/SIGNRF.o    ${OUT}/SMITH.o      ${OUT}/SMP.o       ${OUT}/SMTS.o       \
${OUT}/SOLVEFOR.o  ${OUT}/SPLTREE.o    ${OUT}/STINPROD.o  ${OUT}/STTF.o       \
${OUT}/STTFNC.o    ${OUT}/SUBRESP.o    ${OUT}/SUBSPACE.o  ${OUT}/SUMRF.o      \
${OUT}/SUP.o       ${OUT}/SUPEXPR.o   ${OUT}/SUPFRACF.o  ${OUT}/TANEXP.o     \
${OUT}/TEMUTL.o    ${OUT}/TEX.o        ${OUT}/TEXTFILE.o  ${OUT}/TREE.o       \
${OUT}/TWOFACT.o   ${OUT}/UNIFACT.o    ${OUT}/UP.o        ${OUT}/UPCDEN.o     \
${OUT}/UPDECOMP.o  ${OUT}/UPDIVP.o    ${OUT}/UPMP.o      ${OUT}/UPOLYC2.o    \
${OUT}/UPXSCAT.o   ${OUT}/UPSQFREE.o   ${OUT}/VIEWDEF.o   ${OUT}/VIEW2D.o     \
${OUT}/VOID.o      ${OUT}/WEIER.o      ${OUT}/WP.o        \

```

layer11done

—————

— layerpic —

```

/* layer 11 */
/* depends on: DIRPCAT FAXF PFECAT STRING */

"ASP1" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP1"]
/*"ASP1" -> {"FORTFN"; "FORTCAT"; "TYPE"; "KOERCE"; "FPS"; "RNS"; "FIELD"}*/
/*"ASP1" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ASP1" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ASP1" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ASP1" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"ASP1" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"ASP1" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "FMTC"}*/
/*"ASP1" -> {"INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"ASP1" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"ASP1" -> {"EVALAB"; "IEVALAB"; "FLINEXP"}*/
"ASP1" -> "PFECAT"

"ASP10" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP10"]
/*"ASP10" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"ASP10" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP10" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP10" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP10" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"ASP10" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP10" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"ASP10" -> {"FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"}*/
/*"ASP10" -> {"STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP10" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"ASP10" -> "PFECAT"
/*"ASP10" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"ASP10" -> {"AGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "INT"; "VECTOR"; "IVECTOR"}*/
/*"ASP10" -> {"IARRAY1"; "NNI"; "PI"}*/

"ASP24" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP24"]
/*"ASP24" -> {"FORTFN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"; "RNS"}*/
/*"ASP24" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP24" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP24" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP24" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"ASP24" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP24" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"ASP24" -> {"FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"}*/
/*"ASP24" -> {"STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP24" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"ASP24" -> "PFECAT"

"ASP4" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP4"]
/*"ASP4" -> {"FORTFN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"}*/

```

```

/*"ASP4" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP4" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP4" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP4" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP4" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP4" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP4" -> {"CHARZ"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP4" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"ASP4" -> {"CHARNZ"; "FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"ASP4" -> "PFECAT"

"ASP50" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP50"]
/*"ASP50" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"}*/
/*"ASP50" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP50" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP50" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP50" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ASP50" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ASP50" -> {"OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"}*/
/*"ASP50" -> {"PATMAB"; "CHARZ"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"ASP50" -> {"LINEXP"; "CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"ASP50" -> {"AMR"; "CHARNZ"; "FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"ASP50" -> "PFECAT"

"ASP6" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP6"]
/*"ASP6" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"}*/
/*"ASP6" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP6" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP6" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP6" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP6" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP6" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP6" -> {"CHARZ"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP6" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"ASP6" -> {"CHARNZ"; "FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"ASP6" -> "PFECAT"

"ASP73" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP73"]
/*"ASP73" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"ASP73" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP73" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP73" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP73" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP73" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ASP73" -> {"OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"}*/
/*"ASP73" -> {"PATMAB"; "CHARZ"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP73" -> {"CFCAT"; "STEP"; "OM"; "INT"; "VECTOR"; "IVECTOR"}*/
/*"ASP73" -> {"IARRAY1"; "PI"; "NNI"; "FMTC"; "POLYCAT"; "PDRING"}*/
/*"ASP73" -> {"FAMR"; "AMR"; "CHARNZ"; "FRETRACT"; "EVALAB"; "IEVALAB"}*/
/*"ASP73" -> "FLINEXP"*/
"ASP73" -> "PFECAT"

"AXSERV" [color="#FF4488",href="bookvol10.4.pdf#nameddest=AXSERV"]
"AXSERV" -> "STRING"

```

```

/*"AXSERV" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"AXSERV" -> {"A1AGG-"; "ISTRING"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"AXSERV" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"AXSERV" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"AXSERV" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"AXSERV" -> {"OM"; "ILIST"; "NNI"; "SRAGG-"; "LSAGG-"; "STAGG-"}*/
/*"AXSERV" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "PI"; "STRICAT"; "SRAGG"}*/
/*"AXSERV" -> {"A1AGG"; "ORDFIN"; "FINITE"}*/

"BALFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=BALFACT"]
/*"BALFACT" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"BALFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"BALFACT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"BALFACT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/
/*"BALFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"BALFACT" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"BALFACT" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"BALFACT" -> "PFECAT"
/*"BALFACT" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"BALFACT" -> {"PID"; "FIELD"; "DIVRING"; "INT"; "LIST"; "ILIST"}*/
/*"BALFACT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"BALFACT" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"BALFACT" -> {"ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/

"BEZOUT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=BEZOUT"]
/*"BEZOUT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"BEZOUT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"BEZOUT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"BEZOUT" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"BEZOUT" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"BEZOUT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"BEZOUT" -> {"PATMAB"; "GCDDOM"}*/
"BEZOUT" -> "PFECAT"
/*"BEZOUT" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"BEZOUT" -> {"PID"; "FIELD"; "DIVRING"; "MATCAT"; "ARR2CAT"; "HOAGG"}*/
/*"BEZOUT" -> {"AGG"; "TYPE"; "FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"BEZOUT" -> {"NNI"; "INT"; "BOOLEAN"; "SINT"; "PI"}*/

"BINARY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BINARY"]
/*"BINARY" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"BINARY" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"BINARY" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"BINARY" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"BINARY" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"BINARY" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"}*/
/*"BINARY" -> {"PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"}*/
/*"BINARY" -> {"FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"}*/
/*"BINARY" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"BINARY" -> {"CHARZ"; "CHARNZ"}*/
"BINARY" -> "PFECAT"
/*"BINARY" -> {"INS"; "CFCAT"; "OM"; "FPS"; "RNS"; "RADCAT"; "UPOLYC"}*/
/*"BINARY" -> {"POLYCAT"; "FAMR"; "AMR"; "FRETRCT"}*/

"BINFILE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BINFILE"]

```

```

/*"BINFILE" -> {"FILECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FNCAT"; "INS"}*/
/*"BINFILE" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"BINFILE" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"BINFILE" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"BINFILE" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"BINFILE" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"BINFILE" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"BINFILE" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
"BINFILE" -> "STRING"
/*"BINFILE" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"BINFILE" -> {"A1AGG-"; "ISTRING"}*/

"BOUNDZRO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=BOUNDZRO"]
/*"BOUNDZRO" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"BOUNDZRO" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"BOUNDZRO" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"BOUNDZRO" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"BOUNDZRO" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "UPOLYC"}*/
/*"BOUNDZRO" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"BOUNDZRO" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"BOUNDZRO" -> {"ORDSET"; "KONVERT"; "PATMAB"}*/
"BOUNDZRO" -> "PFECAT"
/*"BOUNDZRO" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INS"; "OINTDOM"}*/
/*"BOUNDZRO" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"}*/
/*"BOUNDZRO" -> {"REAL"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"BOUNDZRO" -> {"INT"; "ES"; "OM"}*/

"BPADICRT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BPADICRT"]
/*"BPADICRT" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"BPADICRT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"BPADICRT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"BPADICRT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"BPADICRT" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"; "ELTAB"}*/
/*"BPADICRT" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"BPADICRT" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"BPADICRT" -> {"TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"}*/
/*"BPADICRT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"BPADICRT" -> {"CHARZ"; "CHARNZ"}*/
"BPADICRT" -> "PFECAT"
/*"BPADICRT" -> {"PADICCT"; "FPS"; "RNS"; "RADCAT"; "INS"; "CFCAT"}*/
/*"BPADICRT" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "FRETRCT"}*/

"BRILL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=BRILL"]
/*"BRILL" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"BRILL" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"BRILL" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"BRILL" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"BRILL" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"BRILL" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"BRILL" -> "GCDDOM"*/
"BRILL" -> "PFECAT"
/*"BRILL" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"BRILL" -> {"PID"; "FIELD"; "DIVRING"; "NNI"; "INT"; "BOOLEAN"}*/
/*"BRILL" -> {"INS-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/

```

```

/*"BRILL" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "FPS"; "RNS"; "RADCAT"}*/
/*"BRILL" -> {"OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"BRILL" -> {"ELEMFUN"; "PI"}*/

"CADU" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CADU"]
/*"CADU" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"} */
/*"CADU" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"} */
/*"CADU" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"} */
/*"CADU" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "LORER"; "UPOLYC"}*/
/*"CADU" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"CADU" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"} */
/*"CADU" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"CADU" -> "PFECAT"
/*"CADU" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"CADU" -> {"PID"; "FIELD"; "DIVRING"; "INT"; "LIST"; "ILIST"}*/
/*"CADU" -> {"NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"CADU" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"CADU" -> {"FLAGG"; "ELAGG"; "OM"}*/

"CDEN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CDEN"]
/*"CDEN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"CDEN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"CDEN" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"CDEN" -> {"MODULE"; "ENTIRER"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"}*/
/*"CDEN" -> {"GCDDOM"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"CDEN" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"CDEN" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"CDEN" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"}*/
/*"CDEN" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"CDEN" -> {"CHARZ"; "CHARNZ"}*/
"CDEN" -> "PFECAT"
/*"CDEN" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/

"CHVAR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CHVAR"]
/*"CHVAR" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"CHVAR" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"CHVAR" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CHVAR" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"CHVAR" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"CHVAR" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"CHVAR" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"CHVAR" -> "PFECAT"
/*"CHVAR" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"CHVAR" -> {"FIELD"; "DIVRING"; "NNI"; "INT"; "BOOLEAN"; "PI"; "INS"}*/
/*"CHVAR" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"CHVAR" -> {"CFCAT"; "REAL"; "OM"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"CHVAR" -> {"FPATMAB"; "TYPE"; "SINT"}*/

"COMMUPC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMMUPC"]
/*"COMMUPC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"COMMUPC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"COMMUPC" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"COMMUPC" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"COMMUPC" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/

```

```

/*"COMMUPC" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"COMMUPC" -> {"PATMAB"; "GCDDOM"}*/
"COMMUPC" -> "PFECAT"
/*"COMMUPC" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"COMMUPC" -> {"PID"; "FIELD"; "DIVRING"; "BOOLEAN"}*/

"CONTFRAC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CONTFRAC"]
/*"CONTFRAC" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CONTFRAC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"CONTFRAC" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "FIELD"}*/
/*"CONTFRAC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"CONTFRAC" -> {"UFD"; "DIVRING"; "QFCAT"; "RETRACT"; "FEVALAB"; "ELTAB"}*/
/*"CONTFRAC" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"CONTFRAC" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"CONTFRAC" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"CONTFRAC" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"CONTFRAC" -> "PFECAT"
/*"CONTFRAC" -> {"BOOLEAN"; "INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"}*/
/*"CONTFRAC" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"CONTFRAC" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "SINT"}*/
/*"CONTFRAC" -> {"NNI"; "LSAGG-"; "INS"; "CFCAT"}*/

"CVMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CVMP"]
/*"CVMP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CVMP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"CVMP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "POLYCAT"; "PDRING"}*/
/*"CVMP" -> {"FAMR"; "AMR"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"CVMP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"CVMP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"CVMP" -> "PFECAT"
/*"CVMP" -> {"UFD"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"CVMP" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "VECTCAT"; "A1AGG"}*/
/*"CVMP" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"CVMP" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "LIST"; "ILIST"; "QFCAT"}*/
/*"CVMP" -> {"FIELD"; "EUCDOM"; "PID"; "DIVRING"; "FEVALAB"; "DIFEXT"}*/
/*"CVMP" -> {"DIFRING"; "PATAB"; "FPATMAB"; "STEP"; "OINTDOM"; "ORDRING"}*/
/*"CVMP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/

"CYCLOTOM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CYCLOTOM"]
/*"CYCLOTOM" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"CYCLOTOM" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"CYCLOTOM" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CYCLOTOM" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"CYCLOTOM" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"CYCLOTOM" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"CYCLOTOM" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"CYCLOTOM" -> {"STEP"; "INT"; "NNI"; "SINT"; "LIST"; "UPOLYC"}*/
/*"CYCLOTOM" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"CYCLOTOM" -> {"EVALAB"; "IEVALAB"; "FLINEXP"}*/
"CYCLOTOM" -> "PFECAT"
/*"CYCLOTOM" -> {"ELTAB"; "DIFEXT"; "FIELD"; "DIVRING"}*/

"CYCLES" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CYCLES"]
/*"CYCLES" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/

```



```

/*"CYCLES" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"CYCLES" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"CYCLES" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"CYCLES" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"CYCLES" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"CYCLES" -> {"REAL"; "CHARZ"; "STEP"; "QFCAT"; "FIELD"; "DIVRING"}*/
/*"CYCLES" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "PDRING"}*/
/*"CYCLES" -> {"FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"}*/
"CYCLES" -> "PFECAT"
/*"CYCLES" -> {"INT"; "INS-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"CYCLES" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"CYCLES" -> {"FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"; "SINT"; "NNI"}*/
/*"CYCLES" -> {"PI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"CYCLES" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "FAMR"; "AMR"; "FRETRCT"}*/

"DDFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DDFACT"]
/*"DDFACT" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DDFACT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DDFACT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DDFACT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DDFACT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"DDFACT" -> {"FINITE"; "STEP"; "DIFRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"DDFACT" -> {"FAMR"; "AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"DDFACT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"DDFACT" -> "PFECAT"
/*"DDFACT" -> {"ELTAB"; "DIFEXT"; "NNI"; "INT"; "SINT"; "PI"; "LIST"}*/
/*"DDFACT" -> {"ILIST"; "BOOLEAN"; "MONOID-"; "ABELMON-"; "INS"; "OINTDOM"}*/
/*"DDFACT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"}*/
/*"DDFACT" -> "REAL"*/

"DECIMAL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DECIMAL"]
/*"DECIMAL" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"DECIMAL" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"DECIMAL" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"DECIMAL" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"DECIMAL" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"DECIMAL" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"DECIMAL" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"DECIMAL" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"}*/
/*"DECIMAL" -> {"ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DECIMAL" -> {"OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"DECIMAL" -> "PFECAT"
/*"DECIMAL" -> {"INS"; "CFCAT"; "OM"; "FPS"; "RNS"; "RADCAT"; "UPOLYC"}*/
/*"DECIMAL" -> {"POLYCAT"; "FAMR"; "AMR"; "FRETRCT"}*/

"DIOPS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DIOPS"]
/*"DIOPS" -> {"BGAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"DIOPS" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/
"DIOPS" -> "STRING"
/*"DIOPS" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"DIOPS" -> {"A1AGG-"; "ISTRING"}*/

"DIOPS-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIOPS"]
/*"DIOPS-" -> {"BGAGG"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/

```

```

/*"DIOPS-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"DIOPS-" -> "KONVERT"*/
"DIOPS-" -> "STRING"
/*"DIOPS-" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"DIOPS-" -> {"A1AGG-"; "ISTRING"}*/

"DIRPROD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIRPROD"]
"DIRPROD" -> "DIRPCAT"
/*"DIRPROD" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DIRPROD" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"DIRPROD" -> {"FRETRCT"; "RETRACT"; "BMODULE"; "LMODULE"; "ABELGRP"}*/
/*"DIRPROD" -> {"CABMON"; "ABELMON"; "ABELSG"; "RMODULE"; "DIFEXT"}*/
/*"DIRPROD" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "DIFRING"; "PDRING"}*/
/*"DIRPROD" -> {"FLINEXP"; "LINEXP"; "FINITE"; "ALGEBRA"; "MODULE"}*/
/*"DIRPROD" -> {"COMRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"DIRPROD" -> {"OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "FIELD"}*/
/*"DIRPROD" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"}*/
/*"DIRPROD" -> {"DIVRING"; "INS"; "OINTDOM"; "KONVERT"; "PATMAB"; "CFCAT"}*/
/*"DIRPROD" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "INT"; "VECTOR"}*/
/*"DIRPROD" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"; "SINT"; "NNI"}*/
/*"DIRPROD" -> {"BOOLEAN"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "CLAGG"}*/
/*"DIRPROD" -> "PI"*/

"DISPLAY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DISPLAY"]
/*"DISPLAY" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"}*/
"DISPLAY" -> "STRING"
/*"DISPLAY" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"DISPLAY" -> {"STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"DISPLAY" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DISPLAY" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"DISPLAY" -> {"KONVERT"; "ORDSET"; "OM"}*/

"DIVRING" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DIVRING",
           shape=ellipse]
/*"DIVRING" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DIVRING" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DIVRING" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DIVRING" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"DIVRING" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"DIVRING" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"DIVRING" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"DIVRING" -> {"REAL"; "CHARZ"; "STEP"; "QFCAT"; "FIELD"}*/
/*"DIVRING" -> {"DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/
/*"DIVRING" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"DIVRING" -> {"TYPE"; "CHARNZ"}*/
"DIVRING" -> "PFECAT"
/*"DIVRING" -> "INT"*/

"DIVRING-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIVRING",
            shape=ellipse]
/*"DIVRING-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"DIVRING-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"DIVRING-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"DIVRING-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/

```

```

/*"DIVRING-" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"DIVRING-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"DIVRING-" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"DIVRING-" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"DIVRING-" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"}*/
/*"DIVRING-" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"}*/
/*"DIVRING-" -> {"PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"}*/
"DIVRING-" -> "PFECAT"
/*"DIVRING-" -> "INT"*/

"DMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DMP"]
/*"DMP" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"DMP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"DMP" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"DMP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"DMP" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"DMP" -> "GCDDOM"*/
"DMP" -> "PFECAT"
/*"DMP" -> {"UFD"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"DMP" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"DMP" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
"DMP" -> "DIRPCAT"
/*"DMP" -> {"DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DMP" -> {"OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"DMP" -> {"PID"; "DIVRING"; "ORDFIN"; "FPS"; "RNS"; "REAL"; "RADCAT"}*/
/*"DMP" -> {"INS"; "OINTDOM"; "CFCAT"; "STEP"; "UPOLYC"}*/

"DPMO" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DPMO"]
"DPMO" -> "DIRPCAT"
/*"DPMO" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DPMO" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"}*/
/*"DPMO" -> {"RETRACT"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"}*/
/*"DPMO" -> {"ABELMON"; "ABELSG"; "RMODULE"; "DIFEXT"; "RING"}*/
/*"DPMO" -> {"RNG"; "SGROUP"; "MONOID"; "DIFRING"; "PDRING"; "FLINEXP"}*/
/*"DPMO" -> {"LINEXP"; "FINITE"; "ALGEBRA"; "MODULE"; "COMRING"}*/
/*"DPMO" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"DPMO" -> {"ORDSET"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"DPMO" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"DPMO" -> {"SINT"; "NNI"; "INT"; "INS"; "OINTDOM"; "KONVERT"}*/
/*"DPMO" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"DPOLCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DPOLCAT"]
/*"DPOLCAT" -> {"DVARCAT"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DPOLCAT" -> {"RETRACT"; "POLYCAT"; "PDRING"; "RING"; "RNG"}*/
/*"DPOLCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"DPOLCAT" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"DPOLCAT" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"DPOLCAT" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "EVALAB"}*/
/*"DPOLCAT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"DPOLCAT" -> "GCDDOM"*/
"DPOLCAT" -> "PFECAT"
/*"DPOLCAT" -> {"UFD"; "DIFEXT"; "DIFRING"; "OAMONS"; "OCAMON"}*/
/*"DPOLCAT" -> {"OAMON"; "OASGP"; "NNI"; "INT"; "LIST"}*/

```

```

/*"DPOLCAT" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "LSAGG"}*/
/*"DPOLCAT" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"DPOLCAT" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"DPOLCAT" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "FLAGG-"}*/
/*"DPOLCAT" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"DPOLCAT" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"DPOLCAT" -> {"BASTYPE-"; "SINT"; "INS"; "EUCDOM"; "PID"}*/
/*"DPOLCAT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "CFCAT"; "REAL"; "STEP"}*/

"DPOLCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DPOLCAT"]
/*"DPOLCAT-" -> {"DVARCAT"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DPOLCAT-" -> {"RETRACT"; "POLYCAT"; "PDRING"; "RING"; "RNG"}*/
/*"DPOLCAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"DPOLCAT-" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"DPOLCAT-" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"DPOLCAT-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "EVALAB"}*/
/*"DPOLCAT-" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"DPOLCAT-" -> "GCDDOM"*/
"DPOLCAT-" -> "PFECAT"
/*"DPOLCAT-" -> {"UFD"; "DIFEXT"; "DIFRING"; "OAMONS"; "OCAMON"}*/
/*"DPOLCAT-" -> {"OAMON"; "OASGP"; "NNI"; "INT"; "LIST"; "ILIST"}*/
/*"DPOLCAT-" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "LSAGG"; "STAGG"}*/
/*"DPOLCAT-" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"DPOLCAT-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"DPOLCAT-" -> {"FLAGG"; "ELAGG"; "OM"; "FLAGG-"; "URAGG-"}*/
/*"DPOLCAT-" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"DPOLCAT-" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"DPOLCAT-" -> {"SINT"; "INS"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"DPOLCAT-" -> {"ORDRING"; "OAGROUP"; "CFCAT"; "REAL"; "STEP"}*/

"DSTREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DSTREE"]
/*"DSTREE" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DSTREE" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "INT"; "LIST"; "ILIST"}*/
/*"DSTREE" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"DSTREE" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"DSTREE" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "BOOLEAN"}*/
"DSTREE" -> "STRING"
/*"DSTREE" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

"D01AJFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01AJFA"]
/*"D01AJFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "PI"; "NNI"; "INT"}*/
"D01AJFA" -> "STRING"
/*"D01AJFA" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"D01AJFA" -> {"ISTRING"; "SRAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"}*/
/*"D01AJFA" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"D01AJFA" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"D01AJFA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"D01AJFA" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D01AJFA" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"D01AJFA" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DFLOAT"; "INS-"; "EUCDOM-"}*/
/*"D01AJFA" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"D01AJFA" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"D01AKFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01AKFA"]

```

```

/*"D01AKFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
"D01AKFA" -> "STRING"
/*"D01AKFA" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"D01AKFA" -> {"ISTRING"; "SRAGG-"; "PI"; "FPS"; "RNS"; "FIELD"; "EUCDOM"}*/
/*"D01AKFA" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"D01AKFA" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"D01AKFA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"D01AKFA" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D01AKFA" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"D01AKFA" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DFLOAT"; "INS-"; "EUCDOM-"}*/
/*"D01AKFA" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"D01AKFA" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"D01ALFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01ALFA"]
/*"D01ALFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "STRICAT"}*/
/*"D01ALFA" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"D01ALFA" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"D01ALFA" -> {"CLAGG"; "KONVERT"; "ORDSET"; "OM"; "INT"; "LIST"}*/
/*"D01ALFA" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/
/*"D01ALFA" -> {"NNI"; "INS-"}*/
"D01ALFA" -> "STRING"
/*"D01ALFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"D01ALFA" -> {"SRAGG-"; "PI"; "FPS"; "RNS"; "FIELD"; "EUCDOM"}*/
/*"D01ALFA" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"D01ALFA" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"D01ALFA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"D01ALFA" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D01ALFA" -> {"OAMON"; "OASGP"; "REAL"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"D01ALFA" -> {"CHARZ"; "DIFRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"D01ALFA" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"D01ALFA" -> {"DFLOAT"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"D01ALFA" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"D01ALFA" -> {"ABELGRP-"; "ABELMON-"}*/

"D01AMFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01AMFA"]
/*"D01AMFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
"D01AMFA" -> "STRING"
/*"D01AMFA" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"D01AMFA" -> {"ISTRING"; "SRAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"}*/
/*"D01AMFA" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"D01AMFA" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"D01AMFA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"D01AMFA" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D01AMFA" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"D01AMFA" -> {"RADCAT"; "PATMAB"; "CHARZ"; "PI"; "INS-"; "EUCDOM-"}*/
/*"D01AMFA" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"D01AMFA" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/
/*"D01AMFA" -> "DFLOAT"*/

"D01APFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01APFA"]
/*"D01APFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "DFLOAT"; "INT"}*/
/*"D01APFA" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "PI"; "NNI"}*/
"D01APFA" -> "STRING"
/*"D01APFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

```

```

/*"D01APFA" -> {"SRAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"D01APFA" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"D01APFA" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"D01APFA" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"D01APFA" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"D01APFA" -> {"OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"}*/
/*"D01APFA" -> {"PATMAB"; "CHARZ"; "DIFRING"; "OM"; "TRANFUN"; "TRIGCAT"}*/
/*"D01APFA" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "ELAGG-"}*/
/*"D01APFA" -> {"FLAGG-"; "URAGG-"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"D01APFA" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
/*"D01APFA" -> {"RING-"; "ABELGRP-"; "ABELMON-"}*/

```

```

"D01AQFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01AQFA"]
/*"D01AQFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"D01AQFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"D01AQFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"D01AQFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"D01AQFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"D01AQFA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"D01AQFA" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"}*/
/*"D01AQFA" -> {"OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"D01AQFA" -> {"ELEMFUN"; "SPFCAT"; "INT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"D01AQFA" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"D01AQFA" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"D01AQFA" -> {"ELAGG"; "LIST"; "ILIST"; "NNI"; "PI"}*/
"D01AQFA" -> "STRING"
/*"D01AQFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"D01AQFA" -> {"SRAGG-"; "INS"; "OINTDOM"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"D01AQFA" -> {"QFCAT"; "FEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"}*/
/*"D01AQFA" -> {"FPATMAB"; "CHARNZ"}*/
"D01AQFA" -> "PFECAT"
/*"D01AQFA" -> {"DFLOAT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"D01AQFA" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"D01AQFA" -> {"ABELGRP-"; "ABELMON-"}*/

```

```

"EMR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EMR"]
/*"EMR" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"EMR" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"EMR" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"EMR" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UPOLYC"; "POLYCAT"}*/
/*"EMR" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"EMR" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"EMR" -> {"KONVERT"; "PATMAB"}*/
"EMR" -> "PFECAT"
/*"EMR" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "FIELD"}*/
/*"EMR" -> {"DIVRING"; "INT"; "NNI"; "BOOLEAN"}*/

```

```

"EQ" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EQ"]
/*"EQ" -> {"TYPE"; "IEVALAB"; "SETCAT"; "BASTYPE"; "KOERCE"; "ABELSG"}*/
/*"EQ" -> {"ABELGRP"; "CABMON"; "ABELMON"; "SGROUP"; "MONOID"; "GROUP"}*/
/*"EQ" -> {"RING"; "RNG"; "LMODULE"; "BMODULE"; "RMODULE"; "MODULE"}*/
/*"EQ" -> {"PDRING"; "VSPACE"; "COMRING"; "FIELD"; "EUCDOM"; "PID"}*/
/*"EQ" -> {"GCDDOM"; "INTDOM"; "ALGEBRA"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"EQ" -> {"EVALAB"; "BOOLEAN"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/

```

```

/*"EQ" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"EQ" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"EQ" -> {"STEP"; "POLYCAT"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"; "FLINEXP"}*/
"EQ" -> "PFECAT"
/*"EQ" -> "ES"*/

"ERROR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ERROR"]
/*"ERROR" -> {"INT"; "LIST"}*/
"ERROR" -> "STRING"
/*"ERROR" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

"EVALCYC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EVALCYC"]
/*"EVALCYC" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"EVALCYC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"EVALCYC" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "INS"}*/
/*"EVALCYC" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "EUCDOM"}*/
/*"EVALCYC" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"EVALCYC" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"EVALCYC" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "QFCAT"}*/
/*"EVALCYC" -> {"FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/
/*"EVALCYC" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"EVALCYC" -> "CHARNZ"*/
"EVALCYC" -> "PFECAT"

"EXP3D" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EXP3D"]
"EXP3D" -> "STRING"
/*"EXP3D" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; }*/
/*"EXP3D" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"EXP3D" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"EXP3D" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"EXP3D" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"EXP3D" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"EXP3D" -> {"RADCAT"; "PATMAB"; "CHARZ"; "INT"; "LIST"; "ILIST"; "CHAR"}*/
/*"EXP3D" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "LSAGG"}*/
/*"EXP3D" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"EXP3D" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"EXP3D" -> {"FLAGG"; "ELAGG"; "OM"; "NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"EXP3D" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"EXP3D" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"EXP3D" -> {"DFLOAT"; "PTCAT"; "VECTCAT"; "A1AGG"; "PI"}*/

"E04DGFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04DGFA"]
/*"E04DGFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"E04DGFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"E04DGFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"E04DGFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"E04DGFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"E04DGFA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"E04DGFA" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "LSAGG"}*/
/*"E04DGFA" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"E04DGFA" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"E04DGFA" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"E04DGFA" -> {"ILIST"; "NNI"; "INS-"}*/
"E04DGFA" -> "STRING"

```

```

/*"E04DGFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"E04DGFA" -> {"DIFRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"E04DGFA" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "DFLOAT"; "MONOID-"; "ABELMON-"}*/
/*"E04DGFA" -> {"PI"; "BOOLEAN"}*/

"E04FDFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04FDFA"]
/*"E04FDFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"E04FDFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"E04FDFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"E04FDFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"E04FDFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"E04FDFA" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"E04FDFA" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"E04FDFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"E04FDFA" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"E04FDFA" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"E04FDFA" -> {"LIST"; "ILIST"; "NNI"; "INS-"}*/
"E04FDFA" -> "STRING"
/*"E04FDFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"E04FDFA" -> {"DIFRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"E04FDFA" -> {"ELEMFUN"; "SPFCAT"; "PI"; "VECTOR"; "EUCDOM-"; "UFD-"}*/
/*"E04FDFA" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"E04FDFA" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"E04GCFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04GCFA"]
/*"E04GCFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"E04GCFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"E04GCFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"E04GCFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"E04GCFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"E04GCFA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"E04GCFA" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"E04GCFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"E04GCFA" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"E04GCFA" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"E04GCFA" -> {"LIST"; "ILIST"; "NNI"; "INS-"}*/
"E04GCFA" -> "STRING"
/*"E04GCFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"E04GCFA" -> {"DIFRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"E04GCFA" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "PI"; "DFLOAT"; "VECTOR"}*/
/*"E04GCFA" -> {"MONOID-"; "ABELMON-"}*/

"E04JAFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04JAFA"]
/*"E04JAFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "LIST"}*/
/*"E04JAFA" -> {"ILIST"; "LSAGG-"; "STAGG-"; "FPS"; "RNS"; "FIELD"}*/
/*"E04JAFA" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"E04JAFA" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"E04JAFA" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"E04JAFA" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"E04JAFA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"E04JAFA" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "LSAGG"}*/
/*"E04JAFA" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"E04JAFA" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"E04JAFA" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ELAGG-"; "DIFRING"}*/

```



```

/*"E04JAFA" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"E04JAFA" -> {"SPFCAT"; "INS-"}*/
"E04JAFA" -> "STRING"
/*"E04JAFA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"E04JAFA" -> {"STRICAT"; "SRAGG"; "A1AGG"; "NNI"; "EUCDOM-"; "UFD-"}*/
/*"E04JAFA" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"E04JAFA" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "PI"; "DFLOAT"}*/

```

```

"E04UCFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04UCFA"]
/*"E04UCFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"E04UCFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"E04UCFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"E04UCFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"E04UCFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"E04UCFA" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"E04UCFA" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"E04UCFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"E04UCFA" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"E04UCFA" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"E04UCFA" -> {"LIST"; "ILIST"; "NNI"; "DIFRING"; "TRANFUN"; "TRIGCAT"}*/
/*"E04UCFA" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "LSAGG-"}*/
/*"E04UCFA" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "DFLOAT"; "PI"; "MONOID-"}*/
/*"E04UCFA" -> {"ABELMON-"; "INS"; "OINTDOM"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"E04UCFA" -> {"INS-"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"E04UCFA" -> {"FRETRCT"; "FLINEXP"}*/
"E04UCFA" -> "PFECAT"
/*"E04UCFA" -> {"QFCAT"; "FEVALAB"; "DIFEXT"; "PATAB"; "FPATMAB"; "VECTOR"}*/
/*"E04UCFA" -> "BOOLEAN"*/

```

```

"FACUTIL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FACUTIL"]
/*"FACUTIL" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"FACUTIL" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "RING"}*/
/*"FACUTIL" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "POLYCAT"}*/
/*"FACUTIL" -> {"PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"FACUTIL" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"FACUTIL" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"FACUTIL" -> {"LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"FACUTIL" -> "PFECAT"
/*"FACUTIL" -> {"UFD"; "NNI"; "INT"; "LIST"; "FFIELDC"; "FPC"; "FIELD"}*/
/*"FACUTIL" -> {"EUCDOM"; "PID"; "DIVRING"; "FINITE"; "STEP"; "DIFRING"}*/
/*"FACUTIL" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"FACUTIL" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"FACUTIL" -> {"ABELMON-"; "PI"; "BOOLEAN"}*/

```

```

"FF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FF"]
"FF" -> "FAXF"
/*"FF" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"FF" -> {"DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*"FF" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "KONVERT"; "OAMONS"}*/
/*"FF" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "INS"; "OINTDOM"}*/
/*"FF" -> {"ORDRING"; "OAGROUP"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

```

```

"FFFACTOR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFFACTOR"]
/*"FFFACTOR" -> {"FFIELDC", "FPC", "FIELD", "EUCDOM", "PID", "GCDDOM"}*/
/*"FFFACTOR" -> {"INTDOM", "COMRING", "RING", "RNG", "ABELGRP", "CABMON"}*/
/*"FFFACTOR" -> {"ABELMON", "ABELSG", "SETCAT", "BASTYPE", "KOERCE", "SGROUP"}*/
/*"FFFACTOR" -> {"MONOID", "LMODULE", "BMODULE", "RMODULE", "ALGEBRA"}*/
/*"FFFACTOR" -> {"MODULE", "ENTIRER", "UFD", "DIVRING", "CHARNZ", "FINITE"}*/
/*"FFFACTOR" -> {"STEP", "DIFRING", "UPOLYC", "POLYCAT", "PDRING", "FAMR"}*/
/*"FFFACTOR" -> {"AMR", "CHARZ", "FRETRCT", "RETRACT", "EVALAB", "IEVALAB"}*/
/*"FFFACTOR" -> {"FLINEXP", "LINEXP", "ORDSET", "KONVERT", "PATMAB"}*/
"FFFACTOR" -> "PFECAT"
/*"FFFACTOR" -> {"ELTAB", "DIFEXT", "NNI", "INT", "PI", "PRIMARR", "A1AGG"}*/
/*"FFFACTOR" -> {"FLAGG", "LNAGG", "IXAGG", "HOAGG", "AGG", "TYPE", "ELTAGG"}*/
/*"FFFACTOR" -> {"CLAGG", "BOOLEAN", "SINT", "LIST", "ILIST", "LSAGG-"}*/
/*"FFFACTOR" -> {"STAGG-", "INS-", "INS", "OINTDOM", "ORDRING", "OAGROUP"}*/
/*"FFFACTOR" -> {"OCAMON", "OAMON", "OASGP", "CFCAT", "REAL"}*/

"FFCG" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFCG"]
"FFCG" -> "FAXF"
/*"FFCG" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFCG" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFCG" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFCG" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFCG" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"}*/
/*"FFCG" -> {"FPC"; "CHARNZ"; "FINITE"; "FFIELDC"; "STEP"; "DIFRING"}*/
/*"FFCG" -> {"KONVERT"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"FFCG" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "LINEXP"}*/
/*"FFCG" -> {"PATMAB"; "CFCAT"; "REAL"}*/

"FFCGX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFCGX"]
"FFCGX" -> "FAXF"
/*"FFCGX" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FFCGX" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FFCGX" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FFCGX" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"FFCGX" -> {"DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*"FFCGX" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "OAMONS"; "OCAMON"}*/
/*"FFCGX" -> {"OAMON"; "OASGP"; "ORDSET"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"FFCGX" -> {"OAGROUP"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

"FFFG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFFG"]
/*"FFFG" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FFFG" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FFFG" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FFFG" -> {"MODULE"; "ENTIRER"; "GCDDOM"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"FFFG" -> {"NNI"; "INT"; "SINT"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"FFFG" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"FFFG" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"FFFG" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"FFFG" -> {"FAMR"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
"FFFG" -> "PFECAT"
/*"FFFG" -> {"UFD"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"}*/
/*"FFFG" -> {"DIVRING"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/
/*"FFFG" -> {"OM"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/

```

```

/*"FFFG" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"FFFG" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"FFFG" -> {"MONOID-"; "ABELMON-"; "SGROUP-"; "ABELSG-"; "PI"; "OAMONS"}*/
/*"FFFG" -> {"OCAMON"; "OAMON"; "OASGP"; "VECTCAT-"; "A1AGG-"; "BOOLEAN"}*/

```

```

"FFHOM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFHOM"]
"FFHOM" -> "FAXF"
/*"FFHOM" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFHOM" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFHOM" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFHOM" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFHOM" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"}*/
/*"FFHOM" -> {"FPC"; "CHARNZ"; "FINITE"; "FFIELDC"; "STEP"; "DIFRING"}*/
/*"FFHOM" -> {"NNI"; "INT"; "BOOLEAN"; "SINT"; "PI"; "PRIMARR"}*/
/*"FFHOM" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"; "A1AGG"}*/
/*"FFHOM" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FFHOM" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"FFHOM" -> "ORDSET"*/

```

```

"FFNB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFNB"]
"FFNB" -> "FAXF"
/*"FFNB" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFNB" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFNB" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFNB" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFNB" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"}*/
/*"FFNB" -> {"FPC"; "CHARNZ"; "FINITE"; "FFIELDC"; "STEP"; "DIFRING"}*/
/*"FFNB" -> {"KONVERT"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"FFNB" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "LINEXP"; "PATMAB"}*/
/*"FFNB" -> {"CFCAT"; "REAL"}*/

```

```

"FFNBX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFNBX"]
"FFNBX" -> "FAXF"
/*"FFNBX" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFNBX" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFNBX" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFNBX" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFNBX" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"}*/
/*"FFNBX" -> {"FPC"; "CHARNZ"; "FINITE"; "FFIELDC"; "STEP"; "DIFRING"}*/
/*"FFNBX" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "INS"}*/
/*"FFNBX" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "KONVERT"; "LINEXP"}*/
/*"FFNBX" -> {"PATMAB"; "CFCAT"; "REAL"}*/

```

```

"FFPOLY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFPOLY"]
/*"FFPOLY" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FFPOLY" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FFPOLY" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FFPOLY" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FFPOLY" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*"FFPOLY" -> {"STEP"; "DIFRING"; "INT"; "LIST"; "ILIST"; "PI"}*/
/*"FFPOLY" -> {"NNI"; "PRIMARR"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"FFPOLY" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FFPOLY" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "SINT"; "BOOLEAN"}*/
/*"FFPOLY" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"}*/

```

```

/*FFPOLY" -> {"FLAGG-"; "LNAGG-"; "IXAGG-"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*FFPOLY" -> {"FAMR"; "AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "FLINEXP"}*/
/*FFPOLY" -> {"LINEXP"; "PATMAB"}*/
"FFPOLY" -> "PFECAT"
/*FFPOLY" -> {"DIFEXT"; "LSAGG-"; "STAGG-"; "MONOID-"; "ABELSG-"; "SGROUP-"}*/
/*FFPOLY" -> {"INS-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*FFPOLY" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "LSAGG"; "STAGG"; "URAGG"}*/
/*FFPOLY" -> {"RCAGG"; "ELAGG"; "OM"; "ELAGG-"; "URAGG-"; "RCAGG-"}*/
/*FFPOLY" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*FFPOLY" -> {"SETCAT-"; "BASTYPE-"}*/

"FFSQFR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFSQFR"]
/*FFSQFR" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*FFSQFR" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*FFSQFR" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*FFSQFR" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*FFSQFR" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*FFSQFR" -> {"STEP"; "DIFRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*FFSQFR" -> {"AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*FFSQFR" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"FFSQFR" -> "PFECAT"
/*FFSQFR" -> {"ELTAB"; "DIFEXT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*FFSQFR" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "SINT"; "NNI"}*/
/*FFSQFR" -> {"INT"; "BOOLEAN"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*FFSQFR" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
/*FFSQFR" -> {"RING-"; "ABELGRP-"}*/

"FFX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFX"]
"FFX" -> "FAXF"
/*FFX" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*FFX" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*FFX" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*FFX" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*FFX" -> {"UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*FFX" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "OAMONS"; "OCAMON"}*/
/*FFX" -> {"OAMON"; "OASGP"; "ORDSET"; "INS"; "OINTDOM"; "ORDRING"}*/
/*FFX" -> {"OAGROUP"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

"FFSLPE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFSLPE"]
/*FFSLPE" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*FFSLPE" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*FFSLPE" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*FFSLPE" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*FFSLPE" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*FFSLPE" -> {"STEP"; "DIFRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*FFSLPE" -> {"FAMR"; "AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*FFSLPE" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*FFSLPE" -> "PATMAB"*/
"FFSLPE" -> "PFECAT"
/*FFSLPE" -> {"ELTAB"; "DIFEXT"; "NNI"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/

"FGLMICPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FGLMICPK"]
/*FGLMICPK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*FGLMICPK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/

```

```

/*"FGLMICPK" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FGLMICPK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "LSAGG"}*/
/*"FGLMICPK" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"FGLMICPK" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"FGLMICPK" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"FGLMICPK" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
"FGLMICPK" -> "DIRPCAT"
/*"FGLMICPK" -> {"FRETRCT"; "RETRACT"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"FGLMICPK" -> {"FLINEXP"; "LINEXP"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"FGLMICPK" -> {"OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"}*/
/*"FGLMICPK" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"}*/
/*"FGLMICPK" -> {"ORDFIN"; "BOOLEAN"; "NNI"; "POLYCAT"; "FAMR"}*/
/*"FGLMICPK" -> {"AMR"; "CHARZ"; "CHARNZ"; "PATMAB"}*/
"FGLMICPK" -> "PFECAT"
/*"FGLMICPK" -> {"LSAGG-"; "STAGG-"; "ELAGG-"}*/

"FILE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FILE"]
/*"FILE" -> {"FILECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FNCAT"}*/
"FILE" -> "STRING"
/*"FILE" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"FILE" -> {"A1AGG-"; "ISTRING"}*/

"FINAALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FINAALG"]
/*"FINAALG" -> {"NAALG"; "NARNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FINAALG" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"}*/
/*"FINAALG" -> {"MODULE"; "BMODULE"; "LMODULE"; "RMODULE"; "COMRING"}*/
/*"FINAALG" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "UPOLYC"}*/
/*"FINAALG" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "ALGEBRA"}*/
/*"FINAALG" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"FINAALG" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"FINAALG" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"FINAALG" -> "PFECAT"
/*"FINAALG" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"FINAALG" -> {"PID"; "FIELD"; "DIVRING"; "SINT"; "PI"; "NNI"; "INT"}*/
/*"FINAALG" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "BOOLEAN"}*/
"FINAALG" -> "STRING"
/*"FINAALG" -> {"CHAR"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"FINAALG" -> {"SRAGG-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FINAALG" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"; "ILIST"; "VECTCAT"}*/
/*"FINAALG" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"FINAALG" -> {"TYPE"; "ELTAGG"; "CLAGG"; "VECTCAT-"; "MONOID-"; "ABELSG-"}*/
/*"FINAALG" -> "SGROUP-"/>

```

```

"FINAALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FINAALG"]
/*"FINAALG-" -> {"NAALG"; "NARNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FINAALG-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"}*/
/*"FINAALG-" -> {"MODULE"; "BMODULE"; "LMODULE"; "RMODULE"; "COMRING"}*/
/*"FINAALG-" -> {"RING"; "RNG"; "SGROUP"; "MONOID"; "UPOLYC"}*/
/*"FINAALG-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "ALGEBRA"}*/
/*"FINAALG-" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"FINAALG-" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"FINAALG-" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"FINAALG-" -> "PFECAT"
/*"FINAALG-" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/

```

```

/*"FINAALG-" -> {"PID"; "FIELD"; "DIVRING"; "SINT"; "PI"; "NNI"}*/
/*"FINAALG-" -> {"INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "BOOLEAN"}*/
"FINAALG-" -> "STRING"
/*"FINAALG-" -> {"CHAR"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"FINAALG-" -> {"ISTRING"; "SRAGG-"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"FINAALG-" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"}*/
/*"FINAALG-" -> {"REAL"; "OM"; "ILIST"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"FINAALG-" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"FINAALG-" -> {"CLAGG"; "VECTCAT-"; "MONOID-"; "ABELSG-"; "SGROUP-"}*/

"FINRALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FINRALG"]
/*"FINRALG-" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FINRALG-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FINRALG-" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "CHARZ"; "CHARNZ"}*/
/*"FINRALG-" -> {"COMRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"FINRALG-" -> {"INTDOM"; "ENTIRER"; "FRETRACT"; "RETRACT"; "EVALAB"}*/
/*"FINRALG-" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"FINRALG-" -> {"PATMAB"; "GCDDOM"}*/
"FINRALG" -> "PFECAT"
/*"FINRALG-" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"FINRALG-" -> {"PID"; "FIELD"; "DIVRING"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"FINRALG-" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"FINRALG-" -> {"CLAGG"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "INS"}*/
/*"FINRALG-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FINRALG-" -> {"OASGP"; "CFCAT"; "REAL"; "OM"; "SINT"; "PI"; "NNI"}*/
/*"FINRALG-" -> {"VECTCAT-"; "A1AGG-"}*/

"FINRALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FINRALG"]
/*"FINRALG-" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FINRALG-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FINRALG-" -> {"SGROUP"; "MONOID"; "LMODULE"; "MODULE"; "BMODULE"}*/
/*"FINRALG-" -> {"RMODULE"; "CHARZ"; "CHARNZ"; "COMRING"; "UPOLYC"}*/
/*"FINRALG-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "INTDOM"}*/
/*"FINRALG-" -> {"ENTIRER"; "FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FINRALG-" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"FINRALG-" -> "GCDDOM"*/
"FINRALG-" -> "PFECAT"
/*"FINRALG-" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"FINRALG-" -> {"PID"; "FIELD"; "DIVRING"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"FINRALG-" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"FINRALG-" -> {"CLAGG"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "INS"}*/
/*"FINRALG-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FINRALG-" -> {"OASGP"; "CFCAT"; "REAL"; "OM"; "SINT"; "PI"}*/
/*"FINRALG-" -> {"NNI"; "VECTCAT-"; "A1AGG-"}*/

"FFF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFF"]
/*"FFF" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FFF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FFF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FFF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFF" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"}*/
/*"FFF" -> {"DIFRING"; "NNI"; "INT"; "SINT"; "PI"; "INS-"; "INS"; "OINTDOM"}*/
/*"FFF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"FFF" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

```

```

/*"FFF" -> {"CHARZ"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-*"/
/*"FFF" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"FFF" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"FFF" -> {"LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"FFF" -> {"ELAGG"; "PRIMARR"; "BOOLEAN"; "MONOID-"; "ABELMON-"; "ORDSET-*"/
/*"FFF" -> {"SGROUP-"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"FFF" -> {"FRETRCT"; "FLINEXP"}*/
"FFF" -> "PFECAT"
/*"FFF" -> "DIFEXT"*/

"FFFGF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFFGF"]
/*"FFFGF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FFFGF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FFFGF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FFFGF" -> {"MODULE"; "ENTIRER"; "GCDDOM"; "FAMR"; "AMR"; "CHARZ"}*/
/*"FFFGF" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"FFFGF" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"FFFGF" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INT"}*/
/*"FFFGF" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "SINT"; "NNI"; "UPOLYC"}*/
/*"FFFGF" -> {"POLYCAT"; "PDRING"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
"FFFGF" -> "PFECAT"
/*"FFFGF" -> {"UFD"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"}*/
/*"FFFGF" -> {"DIVRING"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/
/*"FFFGF" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "QFCAT"; "FEVALAB"}*/
/*"FFFGF" -> {"PATAB"; "FPATMAB"; "OINTDOM"; "ORDRING"; "OAGROUP"; "REAL"}*/

"FLOATRP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FLOATRP"]
/*"FLOATRP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"FLOATRP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"}*/
/*"FLOATRP" -> {"CABMON"; "ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"FLOATRP" -> {"LMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FLOATRP" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FLOATRP" -> {"ENTIRER"; "UFD"; "DIVRING"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"FLOATRP" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"FLOATRP" -> {"CHARZ"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"FLOATRP" -> {"CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"FLOATRP" -> "PFECAT"
/*"FLOATRP" -> {"BOOLEAN"; "OM"; "INT"; "LIST"; "ILIST"}*/

"FNAME" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FNAME"]
/*"FNAME" -> {"FNCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"FNAME" -> "STRING"
/*"FNAME" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"FNAME" -> {"A1AGG-"; "ISTRING"}*/

"FOP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FOP"]
"FOP" -> "STRING"
/*"FOP" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"; "A1AGG-*"/
/*"FOP" -> {"ISTRING"}*/

"FORMULA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FORMULA"]
/*"FORMULA" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "NNI"; "LIST"}*/
"FORMULA" -> "STRING"
/*"FORMULA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ILIST"}*/

```

```

/*"FORMULA" -> {"LSAGG-"; "STAGG-"; "STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"}*/
/*"FORMULA" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"FORMULA" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"FORMULA" -> {"OM"; "ISTRING"; "PI"; "ELAGG-"; "FLAGG-"; "LSAGG"}*/
/*"FORMULA" -> {"STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/

"FORT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FORT"]
/*"FORT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FORT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"FORT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"FORT" -> {"ORDSET"; "ELAGG"; "OM"; "STRICAT"; "SRAGG"; "A1AGG"}*/
/*"FORT" -> {"INT"; "LIST"; "ILIST"}*/
"FORT" -> "STRING"
/*"FORT" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"FORT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FORT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"FORT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FORT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FORT" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"FORT" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"FRAC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FRAC"]
/*"FRAC" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FRAC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FRAC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FRAC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FRAC" -> {"UFD"; "DIVRING"; "RETRACT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"FRAC" -> {"IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"FRAC" -> {"PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"}*/
/*"FRAC" -> {"ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FRAC" -> {"OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"FRAC" -> "PFECCAT"
/*"FRAC" -> {"OM"; "INS"; "CFCAT"; "BOOLEAN"; "NNI"; "INT"; "PI"; "SINT"}*/
/*"FRAC" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"FRAC" -> {"ELTAGG"; "CLAGG"; "VECTOR"; "IVECTOR"; "IARRAY1"; "UPOLYC"}*/
/*"FRAC" -> {"POLYCAT"; "FAMR"; "AMR"; "FRETRACT"; "LIST"; "ILIST"; "FPS"}*/
/*"FRAC" -> {"RNS"; "RADCAT"}*/

"FTEM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FTEM"]
/*"FTEM" -> {"FILECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FNCAT"}*/
"FTEM" -> "STRING"
/*"FTEM" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"; "A1AGG-"}*/
/*"FTEM" -> {"ISTRING"; "BOOLEAN"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"FTEM" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FTEM" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FTEM" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"FTEM" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"FTEM" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"FTEM" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"FTEM" -> {"STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"FTEM" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"FTEM" -> {"ELTAB"; "CLAGG"}*/

"GENEEZ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GENEEZ"]

```



```

/*"GENEEZ" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"GENEEZ" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"GENEEZ" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"GENEEZ" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UPOLYC"}*/
/*"GENEEZ" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"GENEEZ" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"GENEEZ" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"GENEEZ" -> "PFECAT"
/*"GENEEZ" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "FIELD"}*/
/*"GENEEZ" -> {"DIVRING"; "NNI"; "INT"; "MONOID-"; "ABELMON-"; "ORDSET-"}*/
/*"GENEEZ" -> {"SGROUP-"; "PI"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"GENEEZ" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "VECTOR"}*/
/*"GENEEZ" -> {"IVECTOR"; "IARRAY1"; "SINT"; "BOOLEAN"; "VECTCAT"; "A1AGG"}*/
/*"GENEEZ" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"GENEEZ" -> {"CLAGG"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"}*/
/*"GENEEZ" -> {"LIST"; "ILIST"}*/

"GENMFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GENMFACT"]
/*"GENMFACT" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"GENMFACT" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"GENMFACT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"GENMFACT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"GENMFACT" -> {"MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"GENMFACT" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"GENMFACT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"GENMFACT" -> "GCDDOM"*/
"GENMFACT" -> "PFECAT"
/*"GENMFACT" -> {"UFD"; "FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"}*/
/*"GENMFACT" -> {"DIVRING"; "FINITE"; "STEP"; "DIFRING"}*/

"GENPGCD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GENPGCD"]
/*"GENPGCD" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"GENPGCD" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
"GENPGCD" -> "PFECAT"
/*"GENPGCD" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"GENPGCD" -> {"ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"GENPGCD" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"}*/
/*"GENPGCD" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"GENPGCD" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"GENPGCD" -> {"KONVERT"; "PATMAB"; "NNI"; "INT"; "LIST"; "LSAGG"}*/
/*"GENPGCD" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"GENPGCD" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"GENPGCD" -> {"OM"; "ILIST"; "STEP"; "BOOLEAN"; "PI"; "SINT"; "LSAGG-"}*/
/*"GENPGCD" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/

"GALFACTU" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GALFACTU"]
/*"GALFACTU" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"GALFACTU" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GALFACTU" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"GALFACTU" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"GALFACTU" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"GALFACTU" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"GALFACTU" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"GALFACTU" -> "PFECAT"

```

```

/*"GALFACTU" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"GALFACTU" -> {"PID"; "FIELD"; "DIVRING"; "FPS"; "RNS"; "ORDRING"}*/
/*"GALFACTU" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"}*/
/*"GALFACTU" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"GALFACTU" -> {"PI"; "NNI"; "INT"; "MONOID-"; "ABELMON-"; "INS"}*/
/*"GALFACTU" -> {"OINTDOM"; "CFCAT"; "SINT"; "INS-"}*/

"GALPOLYU" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GALPOLYU"]
/*"GALPOLYU" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"GALPOLYU" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GALPOLYU" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"GALPOLYU" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"GALPOLYU" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"GALPOLYU" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"GALPOLYU" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"GALPOLYU" -> "PFECAT"
/*"GALPOLYU" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"GALPOLYU" -> {"PID"; "FIELD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"GALPOLYU" -> {"SINT"; "PI"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"GALPOLYU" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"GALPOLYU" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "VECTOR"; "IVECTOR"}*/
/*"GALPOLYU" -> "IARRAY1"*/

"GB" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GB"]
/*"GB" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GB" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GB" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"GB" -> {"MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"GB" -> {"ORDSET"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"GB" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"GB" -> {"KONVERT"; "PATMAB"}*/
"GB" -> "PFECAT"
/*"GB" -> {"UFD"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "INT"; "LIST"}*/
/*"GB" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"GB" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "BOOLEAN"}*/
"GB" -> "STRING"
/*"GB" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"GB" -> {"PI"; "NNI"}*/

"GBEUCLID" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GBEUCLID"]
/*"GBEUCLID" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"GBEUCLID" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"GBEUCLID" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GBEUCLID" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"GBEUCLID" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "POLYCAT"}*/
/*"GBEUCLID" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"GBEUCLID" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"GBEUCLID" -> {"KONVERT"; "PATMAB"}*/
"GBEUCLID" -> "PFECAT"
/*"GBEUCLID" -> {"UFD"; "INT"}*/
"GBEUCLID" -> "STRING"
/*"GBEUCLID" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"GBEUCLID" -> {"ISTRING"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"GBEUCLID" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/

```

```

/*"GBEUCLID" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"GBEUCLID" -> {"FLAGG"; "ELAGG"; "OM"; "NNI"}*/

"GBF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GBF"]
/*"GBF" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"GBF" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"GBF" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"GBF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "OAMONS"; "OCAMON"}*/
/*"GBF" -> {"OAMON"; "OASGP"; "ORDSET"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"GBF" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"GBF" -> {"LINEXP"; "KONVERT"; "PATMAB"}*/
"GBF" -> "PFECAT"
/*"GBF" -> {"UFD"; "BOOLEAN"; "INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"}*/
/*"GBF" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"GBF" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"GBF" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/

"GBINTERN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GBINTERN"]
/*"GBINTERN" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GBINTERN" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"GBINTERN" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"GBINTERN" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"}*/
/*"GBINTERN" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "POLYCAT"; "PDRING"}*/
/*"GBINTERN" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"GBINTERN" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"}*/
/*"GBINTERN" -> "PATMAB"*/
"GBINTERN" -> "PFECAT"
/*"GBINTERN" -> {"UFD"; "NNI"; "INT"; "BOOLEAN"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"GBINTERN" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"GBINTERN" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"GBINTERN" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "SINT"}*/
/*"GBINTERN" -> "PI"*/

"GHENSEL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GHENSEL"]
/*"GHENSEL" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"GHENSEL" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"GHENSEL" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GHENSEL" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"GHENSEL" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"GHENSEL" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"GHENSEL" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"GHENSEL" -> "PFECAT"
/*"GHENSEL" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "FIELD"}*/
/*"GHENSEL" -> {"DIVRING"; "INT"; "INS-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"GHENSEL" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"GHENSEL" -> {"FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"; "NNI"; "BOOLEAN"}*/

"GMODPOL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GMODPOL"]
/*"GMODPOL" -> {"MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"}*/
/*"GMODPOL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GMODPOL" -> {"RMODULE"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "SGROUP"}*/
/*"GMODPOL" -> {"MONOID"; "FAMR"; "AMR"; "COMRING"; "ALGEBRA"; "CHARZ"}*/
/*"GMODPOL" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"GMODPOL" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/

```

```

/*"GMODPOL" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"GMODPOL" -> "PFECAT"
/*"GMODPOL" -> "UFD"*/
"GMODPOL" -> "DIRPCAT"
/*"GMODPOL" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"; "ELTAB"}*/
/*"GMODPOL" -> {"DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"GMODPOL" -> {"OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"}*/
/*"GMODPOL" -> {"EUCDOM"; "PID"; "DIVRING"}*/

"GRAPHVIZ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GRAPHVIZ"]
"GRAPHVIZ" -> "STRING"
/*"GRAPHVIZ" -> {"LIST"; "CHAR"; "SINT"; "OUTFORM"; "INT"; "PRIMARR"} */
/*"GRAPHVIZ" -> {"A1AGG-"; "ISTRING"} */

"GOSPER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GOSPER"]
/*"GOSPER" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"GOSPER" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "INTDOM"}*/
/*"GOSPER" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"}*/
/*"GOSPER" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"GOSPER" -> {"ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"GOSPER" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"GOSPER" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"GOSPER" -> "PFECAT"
/*"GOSPER" -> {"UFD"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "INS"; "OINTDOM"}*/
/*"GOSPER" -> {"ORDRING"; "OAGROUP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"}*/
/*"GOSPER" -> {"QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"; "PATAB"; "FPATMAB"}*/
/*"GOSPER" -> {"TYPE"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"GOSPER" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"GOSPER" -> {"OM"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"GOSPER" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "SINT"}*/
/*"GOSPER" -> {"NNI"; "PI"; "VECTOR"; "IVECTOR"; "IARRAY1"; "BOOLEAN"}*/
/*"GOSPER" -> {"VECTCAT"; "A1AGG"}*/

"GRIMAGE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GRIMAGE"]
/*"GRIMAGE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INS"; "UFD"; "GCDDOM"}*/
/*"GRIMAGE" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"GRIMAGE" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GRIMAGE" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"GRIMAGE" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"GRIMAGE" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"GRIMAGE" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/
/*"GRIMAGE" -> {"FPS"; "RNS"; "FIELD"; "DIVRING"; "RADCAT"; "INT"; "LSAGG"}*/
/*"GRIMAGE" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"GRIMAGE" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"GRIMAGE" -> {"FLAGG"; "ELAGG"; "LIST"; "ILIST"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"GRIMAGE" -> {"PI"; "DFLOAT"; "PTCAT"; "VECTCAT"; "A1AGG"; "FPS-"; "RNS-"}*/
"GRIMAGE" -> "STRING"
/*"GRIMAGE" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "STRICAT"}*/
/*"GRIMAGE" -> {"SRAGG"; "ISTRING"; "FIELD-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"GRIMAGE" -> {"DIVRING-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"GRIMAGE" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "MONOID-"}*/
/*"GRIMAGE" -> {"ORDSET-"; "ABELSG-"; "SGROUP-"; "TRANFUN-"; "SETCAT-"}*/
/*"GRIMAGE" -> {"ELEMFUN-"; "HYPCAT-"; "ATRIG-"; "TRIGCAT-"; "RADCAT-"}*/
/*"GRIMAGE" -> {"RETRACT-"; "BASTYPE-"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/

```

```

/*"GRIMAGE" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "BOOLEAN"; "ELAGG-"}*/
/*"GRIMAGE" -> {"FLAGG-"; "URAGG-"}*/

"GROEBSOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GROEBSOL"]
/*"GROEBSOL" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GROEBSOL" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"GROEBSOL" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"GROEBSOL" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "LSAGG"}*/
/*"GROEBSOL" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"GROEBSOL" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"GROEBSOL" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INT"}*/
/*"GROEBSOL" -> {"LIST"; "ILIST"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"GROEBSOL" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "FLINEXP"}*/
/*"GROEBSOL" -> {"LINEXP"; "PATMAB"}*/
"GROEBSOL" -> "PFECAT"
/*"GROEBSOL" -> {"UFD"; "NNI"}*/
"GROEBSOL" -> "DIRPCAT"
/*"GROEBSOL" -> {"DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"GROEBSOL" -> {"OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"}*/
/*"GROEBSOL" -> {"EUCDOM"; "PID"; "DIVRING"; "ORDFIN"; "SINT"; "BOOLEAN"}*/
/*"GROEBSOL" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/

"HDMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HDMP"]
/*"HDMP" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"HDMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"HDMP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"HDMP" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"HDMP" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"HDMP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"HDMP" -> "PFECAT"
/*"HDMP" -> {"UFD"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"HDMP" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"HDMP" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
"HDMP" -> "DIRPCAT"
/*"HDMP" -> {"DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"HDMP" -> {"OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"HDMP" -> {"PID"; "DIVRING"; "ORDFIN"; "FPS"; "RNS"; "REAL"; "RADCAT"}*/
/*"HDMP" -> {"INS"; "OINTDOM"; "CFCAT"; "STEP"; "UPOLYC"}*/

"HDP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HDP"]
"HDP" -> "DIRPCAT"
/*"HDP" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"HDP" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"; "RETRACT"}*/
/*"HDP" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"HDP" -> {"RMODULE"; "DIFEXT"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"HDP" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "FINITE"; "ALGEBRA"}*/
/*"HDP" -> {"MODULE"; "COMRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"HDP" -> {"OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"HDP" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "SINT"}*/
/*"HDP" -> {"NNI"; "INT"; "BOOLEAN"; "INS"; "OINTDOM"; "KONVERT"; "PATMAB"}*/
/*"HDP" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"HEXADEC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HEXADEC"]
/*"HEXADEC" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/

```

```

/*"HEXADEC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"HEXADEC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"HEXADEC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"HEXADEC" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"; "ELTAB"}*/
/*"HEXADEC" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"HEXADEC" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"HEXADEC" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"HEXADEC" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"HEXADEC" -> "PFECAT"
/*"HEXADEC" -> {"INS"; "CFCAT"; "OM"; "FPS"; "RNS"; "RADCAT"; "UPOLYC"}*/
/*"HEXADEC" -> {"POLYCAT"; "FAMR"; "AMR"; "FRETRCT"}*/

"HEUGCD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=HEUGCD"]
/*"HEUGCD" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"HEUGCD" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"HEUGCD" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"HEUGCD" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"HEUGCD" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"HEUGCD" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"HEUGCD" -> {"PATMAB"; "GCDDOM"}*/
"HEUGCD" -> "PFECAT"
/*"HEUGCD" -> {"UFD"; "ELTAB"}*/
/*"HEUGCD" -> {"DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"}*/
/*"HEUGCD" -> {"DIVRING"; "INT"; "NNI"; "BOOLEAN"; "PI"; "SINT"; "LIST"}*/
/*"HEUGCD" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"HEUGCD" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"HEUGCD" -> {"OM"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"HEUGCD" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "LSAGG-"; "STAGG-"}*/
/*"HEUGCD" -> {"ELAGG-"; "FLAGG-"; "OAMONS"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"HEUGCD" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"HEUGCD" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "MONOID-"}*/
/*"HEUGCD" -> {"ORDSET-"; "ABELSG-"; "SGROUP-"; "SETCAT-"; "RETRACT-"}*/
/*"HEUGCD" -> "BASTYPE-"/

"HTMLFORM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HTMLFORM"]
"HTMLFORM" -> "STRING"
/*"HTMLFORM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "NNI"; "STRICAT"}*/
/*"HTMLFORM" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"HTMLFORM" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"HTMLFORM" -> {"KONVERT"; "ORDSET"; "OM"; "RCAGG"; "BOOLEAN"; "CHAR"}*/
/*"HTMLFORM" -> {"SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"HTMLFORM" -> {"SRAGG-"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "ELAGG"}*/
/*"HTMLFORM" -> {"LSAGG-"; "ORDFIN"; "FINITE"; "STAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"HTMLFORM" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"HTMLFORM" -> {"SETCAT-"; "BASTYPE-"; "ELAGG-"; "URAGG-"; "INS-"; "PI"}*/
/*"HTMLFORM" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"HTMLFORM" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"HTMLFORM" -> {"ABELMON-"; "MONOID-"; "ABELSG-"; "SGROUP-"; "RETRACT-"}*/

"IBPTOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IBPTOOLS"]
/*"IBPTOOLS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IBPTOOLS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"IBPTOOLS" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"IBPTOOLS" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/

```

```

/*"IBPTOOLS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"IBPTOOLS" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"IBPTOOLS" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"IBPTOOLS" -> "PFECAT"
/*"IBPTOOLS" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"IBPTOOLS" -> {"PID"; "FIELD"; "DIVRING"; "BOOLEAN"; "SINT"; "NNI"; "INT"}*/

"IBITS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IBITS"]
/*"IBITS" -> {"BTAGG"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "LOGIC"}*/
/*"IBITS" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"IBITS" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"IBITS" -> "INT"*/
"IBITS" -> "STRING"
/*"IBITS" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"IBITS" -> {"ISTRING"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IBITS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IBITS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"IBITS" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"IBITS" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"}*/
/*"IBITS" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/
/*"IBITS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "STRICAT"; "SRAGG"; "FINITE"}*/

"ICARD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ICARD"]
/*"ICARD" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "ORDFIN"; "FINITE"}*/
"ICARD" -> "STRING"
/*"ICARD" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"ICARD" -> {"A1AGG-"; "ISTRING"; "PI"; "NNI"}*/

"ICDEN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ICDEN"]
/*"ICDEN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ICDEN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ICDEN" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ICDEN" -> {"ENTIRER"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"ICDEN" -> {"UFD"; "DIVRING"; "RETRACT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"ICDEN" -> {"IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"ICDEN" -> {"PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"}*/
/*"ICDEN" -> {"ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ICDEN" -> {"OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"ICDEN" -> "PFECAT"
/*"ICDEN" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/

"IDECOMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IDECOMP"]
/*"IDECOMP" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"IDECOMP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"IDECOMP" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IDECOMP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"IDECOMP" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"IDECOMP" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"IDECOMP" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"IDECOMP" -> {"STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"IDECOMP" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"IDECOMP" -> "PFECAT"
/*"IDECOMP" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/*"IDECOMP" -> {"PATAB"; "FPATMAB"; "TYPE"}*/

```

```

"IDECOMP" -> "DIRPCAT"
/*"IDECOMP" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "FINITE"; "OAMONS"}*/
/*"IDECOMP" -> {"VSPACE"; "ORDFIN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"IDECOMP" -> {"LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"IDECOMP" -> {"ILIST"; "NNI"; "BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"IDECOMP" -> {"FLAGG-"; "URAGG-"}*/

"IFF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IFF"]
"IFF" -> "FAXF"
/*"IFF" -> {"XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IFF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IFF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IFF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"IFF" -> {"DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*"IFF" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "KONVERT"; "OAMONS"}*/
/*"IFF" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "INS"; "OINTDOM"}*/
/*"IFF" -> {"ORDRING"; "OAGROUP"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

"IIARRAY2" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IIARRAY2"]
/*"IIARRAY2" -> {"ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"IIARRAY2" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"IIARRAY2" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "INT"}*/
/*"IIARRAY2" -> {"PRIMARR"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"IIARRAY2" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "NNI"; "INS"; "UFD"; "GCDDOM"}*/
/*"IIARRAY2" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"IIARRAY2" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IIARRAY2" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"IIARRAY2" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"IIARRAY2" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"IIARRAY2" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "A1AGG"}*/
"IIARRAY2" -> "STRING"
/*"IIARRAY2" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "ISTRING"}*/

/* Note that ILIST has a circular self reference */
"ILIST" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ILIST",
        shape=ellipse]
/*"ILIST" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ILIST" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"ILIST" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"ILIST" -> {"ORDSET"; "ELAGG"; "SINT"; "NNI"; "INT"; "BOOLEAN"; "LIST"}*/
/*"ILIST" -> {"ILIST"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
"ILIST" -> "STRING"
/*"ILIST" -> {"CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "INS"}*/
/*"ILIST" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"ILIST" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"ILIST" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ILIST" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"ILIST" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"ILIST" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"IMATLIN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IMATLIN"]
/*"IMATLIN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IMATLIN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IMATLIN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/

```



```

/*"IMATLIN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"IMATLIN" -> {"ENTIRER"; "UFD"; "DIVRING"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"IMATLIN" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"IMATLIN" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "MATCAT"; "ARR2CAT"}*/
/*"IMATLIN" -> {"BOOLEAN"; "INT"; "SINT"; "NNI"; "LIST"; "A1AGG"; "PI"}*/
/*"IMATLIN" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"IMATLIN" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"IMATLIN" -> "PATMAB"*/
"IMATLIN" -> "PFECAT"
/*"IMATLIN" -> {"DIFRING"; "DIFEXT"; "STEP"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"IMATLIN" -> {"FPATMAB"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"IMATLIN" -> {"OAMON"; "OASGP"; "REAL"; "VECTCAT"; "OM"}*/

"IMATQF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IMATQF"]
/*"IMATQF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"IMATQF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"IMATQF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"IMATQF" -> {"MODULE"; "ENTIRER"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"IMATQF" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"IMATQF" -> {"CLAGG"; "KONVERT"; "ORDSET"; "MATCAT"; "ARR2CAT"; "QFCAT"}*/
/*"IMATQF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"IMATQF" -> {"RETRACT"; "FEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"IMATQF" -> {"FLINEXP"; "LINEXP"; "PATAB"; "FPATMAB"; "PATMAB"; "STEP"}*/
/*"IMATQF" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"IMATQF" -> {"OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"IMATQF" -> "PFECAT"

"INMODGCD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INMODGCD"]
/*"INMODGCD" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"INMODGCD" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"INMODGCD" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INMODGCD" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"INMODGCD" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"INMODGCD" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"INMODGCD" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"INMODGCD" -> "PFECAT"
/*"INMODGCD" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "FIELD"}*/
/*"INMODGCD" -> {"DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"INMODGCD" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "INT"}*/
/*"INMODGCD" -> {"LIST"; "ILIST"; "BOOLEAN"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"INMODGCD" -> {"ELAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"INMODGCD" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"INMODGCD" -> {"FLAGG"; "ELAGG"; "OM"; "OAMONS"; "FLAGG-"; "PI"}*/
/*"INMODGCD" -> {"MONOID-"; "ABELMON-"}*/

"INNMFAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INNMFAC"]
/*"INNMFAC" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"INNMFAC" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"INNMFAC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"INNMFAC" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INNMFAC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/
/*"INNMFAC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"INNMFAC" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"INNMFAC" -> {"KONVERT"; "PATMAB"}*/

```

```

"INNMFAC" -> "PFECAT"
/*"INNMFAC" -> {"UFD"; "PI"; "NNI"; "INT"; "MONOID-"; "ABELSG-"}*/
/*"INNMFAC" -> {"SGROUP-"; "LIST"; "ILIST"; "UPOLYC"; "ELTAB"; "DIFRING"}*/
/*"INNMFAC" -> {"DIFEXT"; "STEP"; "FIELD"; "DIVRING"; "BOOLEAN"; "LSAGG-"}*/
/*"INNMFAC" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "SINT"; "LSAGG"; "STAGG"}*/
/*"INNMFAC" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"INNMFAC" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ABELMON-"}*/
/*"INNMFAC" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/

"INPSIGN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INPSIGN"]
/*"INPSIGN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INPSIGN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INPSIGN" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"INPSIGN" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"INPSIGN" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"INPSIGN" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"INPSIGN" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"INPSIGN" -> "PFECAT"
/*"INPSIGN" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"INPSIGN" -> {"PID"; "FIELD"; "DIVRING"; "INT"; "INS-"}*/

"INTERGB" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTERGB"]
/*"INTERGB" -> {
/*"INTERGB" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INTERGB" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INTERGB" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INTERGB" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INTERGB" -> {"ENTIRER"; "UFD"; "DIVRING"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"INTERGB" -> {"OASGP"; "ORDSET"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"INTERGB" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"INTERGB" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
"INTERGB" -> "PFECAT"
/*"INTERGB" -> {"FFIELDC"; "FPC"; "FINITE"; "STEP"; "DIFRING"; "NNI"; "INT"}*/

"INT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INT",
      shape=ellipse]
/*"INT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"INT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"INT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"INT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"INT" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"INT" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "INT"; "NNI"; "DFLOAT"}*/
"INT" -> "STRING"
/*"INT" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"INT" -> {"ISTRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"INT" -> {"CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"INT" -> "PFECAT"
/*"INT" -> {"ELTAB"; "DIFEXT"; "FIELD"; "DIVRING"; "INS-"}*/

"INTHERTR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTHERTR"]
/*"INTHERTR" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INTHERTR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INTHERTR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/

```

```

/*"INTHERTR" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INTHERTR" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"INTHERTR" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"INTHERTR" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"INTHERTR" -> {"KONVERT"; "PATMAB"}*/
"INTHERTR" -> "PFECAT"
/*"INTHERTR" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "NNI"; "INT"}*/

"INTRAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTRAT"]
/*"INTRAT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INTRAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INTRAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INTRAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"INTRAT" -> {"DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"INTRAT" -> {"FAMR"; "AMR"; "CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"}*/
/*"INTRAT" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"INTRAT" -> "PFECAT"
/*"INTRAT" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"INTRAT" -> {"PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"INTRAT" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"}*/

"INTRF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTRF"]
/*"INTRF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"INTRF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INTRF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INTRF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"; "CHARZ"}*/
/*"INTRF" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"INTRF" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"INTRF" -> {"PATMAB"; "GCDDOM"}*/
"INTRF" -> "PFECAT"
/*"INTRF" -> {"UFD"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/
/*"INTRF" -> {"FEVALAB"; "ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"}*/
/*"INTRF" -> {"TYPE"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"INTRF" -> {"OAMON"; "OASGP"; "REAL"; "UPOLYC"}*/

"INTSLPE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTSLPE"]
/*"INTSLPE" -> {"INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "INS"; "UFD"}*/
/*"INTSLPE" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTSLPE" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"INTSLPE" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INTSLPE" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"INTSLPE" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"INTSLPE" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"INTSLPE" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"INTSLPE" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"INTSLPE" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"INTSLPE" -> "PFECAT"
/*"INTSLPE" -> {"ELTAB"; "DIFEXT"; "FIELD"; "DIVRING"; "LIST"; "ILIST"}*/
/*"INTSLPE" -> "NNI"*/

"INTTR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTTR"]
/*"INTTR" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INTTR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INTTR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/

```

```

/*"INTTR" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"INTTR" -> {"DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"INTTR" -> {"CHARNZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"INTTR" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"INTTR" -> "PFECAT"
/*"INTTR" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"INTTR" -> {"PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"INTTR" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "BOOLEAN"; "NNI"; "INT"}*/
/*"INTTR" -> {"PRIMARR"; "INS"; "CFCAT"; "LIST"; "ILIST"; "PI"; "LSAGG-"}*/
/*"INTTR" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LSAGG"; "STAGG"}*/
/*"INTTR" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"INTTR" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "SINT"}*/

"ISUMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ISUMP"]
/*"ISUMP" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"ISUMP" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "INTDOM"}*/
/*"ISUMP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"}*/
/*"ISUMP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ISUMP" -> {"ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"ISUMP" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"ISUMP" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"ISUMP" -> "PFECAT"
/*"ISUMP" -> {"UFD"; "INS"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"ISUMP" -> {"OAGROUP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"; "QFCAT"}*/
/*"ISUMP" -> {"FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"; "PATAB"}*/
/*"ISUMP" -> {"TYPE"; "FPATMAB"; "INT"; "LIST"; "BOOLEAN"; "NNI"; "ILIST"}*/
/*"ISUMP" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/

"LAUPOL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LAUPOL"]
/*"LAUPOL" -> {"DIFEXT"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LAUPOL" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LAUPOL" -> {"LMODULE"; "DIFRING"; "PDRING"; "INTDOM"; "COMRING"}*/
/*"LAUPOL" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LAUPOL" -> {"KONVERT"; "FRETRCT"; "RETRACT"; "CHARZ"; "CHARNZ"}*/
/*"LAUPOL" -> {"EUCDOM"; "PID"; "GCDDOM"; "FIELD"; "UFD"; "DIVRING"}*/
/*"LAUPOL" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "EVALAB"; "IEVALAB"}*/
/*"LAUPOL" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "PATMAB"}*/
"LAUPOL" -> "PFECAT"
/*"LAUPOL" -> {"ELTAB"; "STEP"; "INT"; "BOOLEAN"; "NNI"; "LIST"; "ILIST"}*/
/*"LAUPOL" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"LAUPOL" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"LAUPOL" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"LAUPOL" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/

"LEADCDET" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LEADCDET"]
/*"LEADCDET" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"; "OCAMON"}*/
/*"LEADCDET" -> {"OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"; "EUCDOM"}*/
/*"LEADCDET" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"LEADCDET" -> {"ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"LEADCDET" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"}*/
/*"LEADCDET" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"LEADCDET" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"LEADCDET" -> {"KONVERT"; "PATMAB"}*/
"LEADCDET" -> "PFECAT"

```

```

/*"LEADCDET" -> {"UFD"; "SINT"; "NNI"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"LEADCDET" -> {"STAGG-"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"LEADCDET" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"LEADCDET" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "PI"}*/

"LGROBP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LGROBP"]
/*"LGROBP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LGROBP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LGROBP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"LGROBP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "VECTCAT"}*/
/*"LGROBP" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LGROBP" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"LGROBP" -> {"ORDSET"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "SINT"}*/
/*"LGROBP" -> {"NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"}*/
/*"LGROBP" -> {"LIST"; "ILIST"}*/
"LGROBP" -> "DIRPCAT"
/*"LGROBP" -> {"FRETRCT"; "RETRACT"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"LGROBP" -> {"FLINEXP"; "LINEXP"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"LGROBP" -> {"OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"}*/
/*"LGROBP" -> {"EUCDOM"; "PID"; "UFD"; "DIVRING"; "ORDFIN"; "PI"; "BOOLEAN"}*/
/*"LGROBP" -> {"VECTCAT-"; "LSAGG-"; "STAGG-"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"LGROBP" -> {"CHARZ"; "CHARNZ"; "PATMAB"}*/
"LGROBP" -> "PFECAT"
/*"LGROBP" -> {"ELAGG-"; "FLAGG-"; "URAGG-"}*/

"LIMITRF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LIMITRF"]
/*"LIMITRF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LIMITRF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LIMITRF" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"LIMITRF" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"}*/
/*"LIMITRF" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"LIMITRF" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"LIMITRF" -> {"ORDSET"; "KONVERT"; "PATMAB"}*/
"LIMITRF" -> "PFECAT"
/*"LIMITRF" -> {"UFD"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/
/*"LIMITRF" -> {"FEVALAB"; "ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"}*/
/*"LIMITRF" -> {"TYPE"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"LIMITRF" -> {"OAMON"; "OASGP"; "REAL"; "INT"; "OM"; "UPOLYC"; "SINT"}*/
/*"LIMITRF" -> "NNI"*/

"LINDEP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LINDEP"]
/*"LINDEP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LINDEP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"LINDEP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"LINDEP" -> {"MODULE"; "ENTIRER"; "LINEXP"; "INT"; "LIST"; "ILIST"}*/
/*"LINDEP" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"LINDEP" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"LINDEP" -> {"CLAGG"; "KONVERT"; "ORDSET"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"LINDEP" -> {"VECTCAT-"; "A1AGG-"; "NNI"; "BOOLEAN"; "INS"; "UFD"}*/
/*"LINDEP" -> {"GCDDOM"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"LINDEP" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "PATMAB"}*/
/*"LINDEP" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "INS-"; "FIELD"}*/
/*"LINDEP" -> {"DIVRING"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"LINDEP" -> {"ORDSET-"; "AGG-"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PDRING"}*/

```

```

/*"LINDEP" -> {"FLINEXP"; "PATAB"; "FPATMAB"; "CHARNZ"}*/
"LINDEP" -> "PFECAT"

"LIYSER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LIYSER"]
/*"LIYSER" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"LIYSER" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LIYSER" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LIYSER" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"LIYSER" -> {"DIVRING"}*/
"LIYSER" -> "LOCPOWC"
/*"LIYSER" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"}*/
/*"LIYSER" -> {"DIFRING"; "PDRING"; "INT"; "LIST"; "ILIST"; "LSAGG"}*/
/*"LIYSER" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"LIYSER" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
/*"LIYSER" -> {"FLAGG"; "ORDSET"; "ELAGG"; "OM"; "LSAGG-"; "NNI"; "STAGG-"}*/

"LO" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LO"]
/*"LO" -> {"MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"LO" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"; "OAGROUP"}*/
/*"LO" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "COMRING"; "RING"; "RNG"}*/
/*"LO" -> {"SGROUP"; "MONOID"}*/
"LO" -> "STRING"
/*"LO" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"LO" -> {"A1AGG-"; "ISTRING"}*/

"LPEFRAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LPEFRAC"]
"LPEFRAC" -> "PFECAT"
/*"LPEFRAC" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"LPEFRAC" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"LPEFRAC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LPEFRAC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LPEFRAC" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "RETRACT"}*/
/*"LPEFRAC" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"}*/
/*"LPEFRAC" -> {"PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"LPEFRAC" -> {"TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"}*/
/*"LPEFRAC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"}*/
/*"LPEFRAC" -> "CHARNZ"*/

"LSPP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LSPP"]
/*"LSPP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LSPP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"LSPP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"LSPP" -> {"MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"LSPP" -> {"ORDSET"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"LSPP" -> {"FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"LSPP" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"LSPP" -> "PFECAT"
/*"LSPP" -> {"UFD"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"LSPP" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"LSPP" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "VECTOR"; "IVECTOR"}*/
/*"LSPP" -> {"IARRAY1"; "SINT"; "NNI"; "BOOLEAN"; "VECTCAT"; "A1AGG"}*/
/*"LSPP" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "FEVALAB"}*/
/*"LSPP" -> {"DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "STEP"; "OINTDOM"}*/
/*"LSPP" -> {"ORDRING"; "OAGROUP"; "REAL"}*/

```

```

"MATLIN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MATLIN"]
/*"MATLIN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MATLIN" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MATLIN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"MATLIN" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"MATLIN" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "MATCAT"; "ARR2CAT"}*/
/*"MATLIN" -> {"BOOLEAN"; "INT"; "PRIMARR"; "LIST"; "ILIST"; "PI"; "NNI"}*/
/*"MATLIN" -> {"A1AGG"; "SINT"; "INTDOM"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"MATLIN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"MATLIN" -> {"VECTCAT"; "QFCAT"; "RETRACT"; "FEVALAB"; "DIFEXT"}*/
/*"MATLIN" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "FPATMAB"}*/
/*"MATLIN" -> {"PATMAB"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"MATLIN" -> {"OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"MATLIN" -> "PFECAT"
/*"MATLIN" -> {"INS"; "CFCAT"}*/

"MCDEN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MCDEN"]
/*"MCDEN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"MCDEN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MCDEN" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"MCDEN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "QFCAT"; "FIELD"; "EUCDOM"}*/
/*"MCDEN" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"MCDEN" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"MCDEN" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"MCDEN" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"MCDEN" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"MCDEN" -> "PFECAT"
/*"MCDEN" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"MCDEN" -> {"AGG"; "ELTAGG"; "CLAGG"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"MCDEN" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/

"MDDFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MDDFACT"]
/*"MDDFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"MDDFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MDDFACT" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"MDDFACT" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"MDDFACT" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"MDDFACT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"MDDFACT" -> {"PATMAB"; "GCDDOM"}*/
"MDDFACT" -> "PFECAT"
/*"MDDFACT" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"MDDFACT" -> {"PID"; "FIELD"; "DIVRING"; "INT"; "INS-"; "EUCDOM-"; "INS"}*/
/*"MDDFACT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"MDDFACT" -> {"CFCAT"; "REAL"; "LIST"; "NNI"; "SINT"; "PI"; "ILIST"}*/

"MFINFAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MFINFAC"]
/*"MFINFAC" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"MFINFAC" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"MFINFAC" -> {"FFIELD"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"MFINFAC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"MFINFAC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"MFINFAC" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*"MFINFAC" -> {"STEP"; "DIFRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/

```

```

/*"MFINFACT" -> {"CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"MFINFACT" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
"MFINFACT" -> "PFECAT"
/*"MFINFACT" -> {"UPOLYC"; "ELTAB"; "DIFEXT"; "INT"; "LIST"; "ILIST"}*/
/*"MFINFACT" -> {"NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "BOOLEAN"}*/
/*"MFINFACT" -> {"PI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"MFINFACT" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"MFINFACT" -> {"ELAGG"; "OM"; "SINT"}*/

"MFLOAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MFLOAT"]
/*"MFLOAT" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"MFLOAT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MFLOAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MFLOAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"MFLOAT" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"MFLOAT" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"MFLOAT" -> {"RADCAT"; "PATMAB"; "CHARZ"; "FMTC"; "INS"; "OINTDOM"}*/
/*"MFLOAT" -> {"DIFRING"; "LINEXP"; "CFCAT"; "STEP"; "INT"; "PI"; "NNI"}*/
/*"MFLOAT" -> {"MONOID-"; "ABELSG-"; "SGROUP-"; "INS-"; "OM"; "EUCDOM-"}*/
/*"MFLOAT" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"MFLOAT" -> "ORDRING-"/>
/*"MFLOAT" -> "STRING"
/*"MFLOAT" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"MFLOAT" -> {"ISTRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"MFLOAT" -> {"AHYP"; "ELEMFUN"; "BOOLEAN"}*/

"MINT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MINT"]
/*"MINT" -> {"FMTC"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"MINT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"MINT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"MINT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"MINT" -> {"RETRACT"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"MINT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"MINT" -> {"KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"MINT" -> {"STEP"; "PI"; "NNI"; "INT"; "MONOID-"; "ABELSG-"; "SGROUP-"}*/
"MINT" -> "STRING"
/*"MINT" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"MINT" -> "ISTRING"*/

"MLIFT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MLIFT"]
/*"MLIFT" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"MLIFT" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "EUCDOM"}*/
/*"MLIFT" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"MLIFT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"MLIFT" -> {"MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"MLIFT" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"MLIFT" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
"MLIFT" -> "PFECAT"
/*"MLIFT" -> {"UFD"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"MLIFT" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"MLIFT" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"; "SINT"}*/
/*"MLIFT" -> {"BOOLEAN"; "LSAGG-"; "STAGG-"; "PI"}*/

"MMAP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MMAP"]

```



```

/*"MMAP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"MMAP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"MMAP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"MMAP" -> {"ENTIRER"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"MMAP" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"MMAP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"MMAP" -> "PFECAT"
/*"MMAP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"MMAP" -> {"FIELD"; "DIVRING"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"}*/
/*"MMAP" -> {"TYPE"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"MMAP" -> {"OASGP"; "REAL"}*/

"MODMON" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MODMON"]
/*"MODMON" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"MODMON" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MODMON" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"MODMON" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"MODMON" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"MODMON" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"MODMON" -> {"PATMAB"; "GCDDOM"}*/
"MODMON" -> "PFECAT"
/*"MODMON" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"MODMON" -> {"PID"; "FIELD"; "DIVRING"; "FINITE"; "NNI"; "INT"; "MONOID-"}*/
/*"MODMON" -> {"ABELMON-"; "PI"; "FFIELDC"; "FPC"; "PRIMARR"; "A1AGG-"}*/
/*"MODMON" -> {"FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"}*/
/*"MODMON" -> {"AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "BOOLEAN"}*/
/*"MODMON" -> {"SINT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"MODMON" -> {"TYPE"; "ELTAGG"; "CLAGG"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"MODMON" -> {"FPS"; "RNS"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"MODMON" -> {"OASGP"; "REAL"; "RADCAT"; "INS"; "OINTDOM"; "CFCAT"}*/

"MONOTOOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MONOTOOL"]
/*"MONOTOOL" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"MONOTOOL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"MONOTOOL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"MONOTOOL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"MONOTOOL" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"}*/
/*"MONOTOOL" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"MONOTOOL" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"MONOTOOL" -> {"ORDSET"; "KONVERT"; "PATMAB"}*/
"MONOTOOL" -> "PFECAT"
/*"MONOTOOL" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "NNI"; "INT"}*/

"MPCPF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MPCPF"]
/*"MPCPF" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"MPCPF" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"MPCPF" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"MPCPF" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"MPCPF" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"}*/
/*"MPCPF" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"MPCPF" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"MPCPF" -> {"KONVERT"; "PATMAB"}*/
"MPCPF" -> "PFECAT"
/*"MPCPF" -> {"UFD"; "INT"; "OM"}*/

```

```

" MPC2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MPC2"]
/*"MPC2" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"; "OCAMON"}*/
/*"MPC2" -> {"OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"; "RING"}*/
/*"MPC2" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "POLYCAT"}*/
/*"MPC2" -> {"PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"MPC2" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"MPC2" -> {"FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"MPC2" -> {"LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
" MPC2" -> "PFECAT"
/*"MPC2" -> {"UFD"; "NNI"; "INT"}*/

" MPC3" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MPC3"]
/*"MPC3" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"; "OCAMON"}*/
/*"MPC3" -> {"OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"; "RING"}*/
/*"MPC3" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "POLYCAT"}*/
/*"MPC3" -> {"PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"MPC3" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"MPC3" -> {"FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"MPC3" -> {"LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
" MPC3" -> "PFECAT"
/*"MPC3" -> {"UFD"; "BOOLEAN"}*/

" MPOLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MPOLY"]
/*"MPOLY" -> {"ORDFIN"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "FINITE"}*/
/*"MPOLY" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"MPOLY" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MPOLY" -> {"FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"MPOLY" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRACT"}*/
/*"MPOLY" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"MPOLY" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
" MPOLY" -> "PFECAT"
/*"MPOLY" -> {"UFD"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/
/*"MPOLY" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"MPOLY" -> {"RADCAT"; "INS"; "OINTDOM"; "DIFRING"; "CFCAT"; "STEP"}*/
/*"MPOLY" -> {"UPOLYC"; "ELTAB"; "DIFEXT"}*/

" MPRFF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MPRFF"]
/*"MPRFF" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"MPRFF" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"MPRFF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"MPRFF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"MPRFF" -> {"MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"MPRFF" -> {"CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"; "EVALAB"}*/
/*"MPRFF" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
" MPRFF" -> "PFECAT"
/*"MPRFF" -> {"UFD"; "INS"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"MPRFF" -> {"DIFRING"; "CFCAT"; "REAL"; "STEP"; "QFCAT"; "FIELD"}*/
/*"MPRFF" -> {"DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"; "PATAB"; "FPATMAB"}*/
/*"MPRFF" -> {"TYPE"; "FFIELDC"; "FPC"; "FINITE"; "BOOLEAN"; "NNI"; "INT"}*/

" MRATFAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MRATFAC"]
/*"MRATFAC" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"MRATFAC" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/

```

```

/*"MRATFAC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"MRATFAC" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"MRATFAC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/
/*"MRATFAC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"MRATFAC" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"MRATFAC" -> {"KONVERT"; "PATMAB"}*/
"MRATFAC" -> "PFECAT"
/*"MRATFAC" -> {"UFD"; "QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"}*/
/*"MRATFAC" -> {"DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "TYPE"; "STEP"}*/
/*"MRATFAC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "REAL"; "PI"; "NNI"}*/
/*"MRATFAC" -> {"INT"; "INS"; "CFCAT"}*/

"MULTSQFR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MULTSQFR"]
/*"MULTSQFR" -> {"OAMONS"; "OCAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"MULTSQFR" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"MULTSQFR" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"MULTSQFR" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"MULTSQFR" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"}*/
/*"MULTSQFR" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"MULTSQFR" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"MULTSQFR" -> {"KONVERT"; "PATMAB"}*/
"MULTSQFR" -> "PFECAT"
/*"MULTSQFR" -> {"UFD"; "PI"; "NNI"; "INT"; "MONOID-"; "ABELSG-"; "SGROUP-"}*/
/*"MULTSQFR" -> {"BOOLEAN"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"MULTSQFR" -> {"FLAGG-"; "UPOLYC"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"MULTSQFR" -> {"FIELD"; "DIVRING"; "SINT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"MULTSQFR" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"MULTSQFR" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INS-"}*/
/*"MULTSQFR" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"MULTSQFR" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"MULTSQFR" -> "ABELMON-"/>

```

```

"NORMALRETR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NORMALRETR"]
/*"NORMALRETR" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"NORMALRETR" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"NORMALRETR" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"NORMALRETR" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"NORMALRETR" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"NORMALRETR" -> {"FINITE"; "STEP"; "DIFRING"}*/
"NORMALRETR" -> "FAXF"
/*"NORMALRETR" -> {"XF"; "RETRACT"; "VSPACE"; "CHARZ"; "UPOLYC"; "POLYCAT"}*/
/*"NORMALRETR" -> {"PDRING"; "FAMR"; "AMR"; "FRETRCT"; "EVALAB"; "IEVALAB"}*/
/*"NORMALRETR" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"NORMALRETR" -> "PFECAT"
/*"NORMALRETR" -> {"ELTAB"; "DIFEXT"; "SINT"; "PI"; "NNI"; "INT"; "LSAGG"}*/
/*"NORMALRETR" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"NORMALRETR" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"NORMALRETR" -> {"LIST"; "ILIST"; "BOOLEAN"}*/

"NPCOEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NPCOEF"]
/*"NPCOEF" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NPCOEF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"NPCOEF" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"NPCOEF" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/

```

```

/*"NPCOEF" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"NPCOEF" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"NPCOEF" -> {"PATMAB"; "GCDDOM"}*/
"NPCOEF" -> "PFECAT"
/*"NPCOEF" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"NPCOEF" -> {"FIELD"; "DIVRING"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"NPCOEF" -> {"INT"; "LIST"; "ILIST"; "SINT"; "NNI"; "VECTOR"; "LSAGG"}*/
/*"NPCOEF" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"NPCOEF" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "BOOLEAN"}*/
/*"NPCOEF" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "PI"; "IVECTOR"}*/
/*"NPCOEF" -> {"IARRAY1"; "VECTCAT"; "A1AGG"}*/

"NSUP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NSUP"]
/*"NSUP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NSUP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"NSUP" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"NSUP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"NSUP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"NSUP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"NSUP" -> "PFECAT"
/*"NSUP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"NSUP" -> {"FIELD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "NNI"; "FPS"}*/
/*"NSUP" -> {"RNS"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"NSUP" -> {"REAL"; "RADCAT"; "INS"; "OINTDOM"; "CFCAT"}*/

"NTPOLFN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NTPOLFN"]
/*"NTPOLFN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NTPOLFN" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NTPOLFN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "INS"; "UFD"; "GCDDOM"}*/
/*"NTPOLFN" -> {"INTDOM"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"NTPOLFN" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"NTPOLFN" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"NTPOLFN" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"NTPOLFN" -> {"NNI"; "INT"; "BOOLEAN"; "QFCAT"; "FIELD"; "DIVRING"}*/
/*"NTPOLFN" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"NTPOLFN" -> {"PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"}*/
"NTPOLFN" -> "PFECAT"

"ODP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ODP"]
"ODP" -> "DIRPCAT"
/*"ODP" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ODP" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"; "RETRACT"}*/
/*"ODP" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODP" -> {"RMODULE"; "DIFEXT"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"ODP" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "FINITE"; "ALGEBRA"}*/
/*"ODP" -> {"MODULE"; "COMRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ODP" -> {"OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"ODP" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "INS"}*/
/*"ODP" -> {"OINTDOM"; "KONVERT"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"ODP" -> {"STEP"; "OM"}*/

"ODEPRIM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODEPRIM"]
/*"ODEPRIM" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODEPRIM" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/

```

```

/*"ODEPRIM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ODEPRIM" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ODEPRIM" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"}*/
/*"ODEPRIM" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"ODEPRIM" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"ODEPRIM" -> {"KONVERT"; "PATMAB"}*/
"ODEPRIM" -> "PFECAT"
/*"ODEPRIM" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "LODOCAT"; "OREPCAT"}*/
/*"ODEPRIM" -> {"NNI"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"ODEPRIM" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"ODEPRIM" -> {"FLAGG"; "ELAGG"; "BOOLEAN"; "LIST"; "ILIST"; "SINT"; "PI"}*/

"ODEPRRIC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODEPRRIC"]
/*"ODEPRRIC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODEPRRIC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODEPRRIC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ODEPRRIC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ODEPRRIC" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"}*/
/*"ODEPRRIC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"ODEPRRIC" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"ODEPRRIC" -> {"KONVERT"; "PATMAB"}*/
"ODEPRRIC" -> "PFECAT"
/*"ODEPRRIC" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "LODOCAT"; "OREPCAT"}*/
/*"ODEPRRIC" -> {"SINT"; "INT"; "NNI"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"ODEPRRIC" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ODEPRRIC" -> {"OASGP"; "CFCAT"; "REAL"; "OM"; "BOOLEAN"; "PI"; "LSAGG"}*/
/*"ODEPRRIC" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"ODEPRRIC" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OAMONS"}*/
/*"ODEPRRIC" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"ODEPRRIC" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/

"OMPKG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OMPKG"]
"OMPKG" -> "STRING"
/*"OMPKG" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"OMPKG" -> {"A1AGG-"; "ISTRING"; "BOOLEAN"}*/

"OMSERVER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OMSERVER"]
/*"OMSERVER" -> {"BOOLEAN"; "INT"; "DFLOAT"}*/
"OMSERVER" -> "STRING"
/*"OMSERVER" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/

"PACRATC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PACRATC"]
"PACRATC" -> "XF"
/*"PACRATC" -> {"VSPACE"; "FPC"; "FINITE"; "PACPERC"}*/

"PADEPAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PADEPAC"]
/*"PADEPAC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PADEPAC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PADEPAC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PADEPAC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PADEPAC" -> {"ENTIRER"; "UFD"; "DIVRING"; "NNI"; "INT"; "UPOLYC"}*/
/*"PADEPAC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"PADEPAC" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PADEPAC" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/

```

```

"PADEPAC" -> "PFECAT"
/*"PADEPAC" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/

"PADICRAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PADICRAT"]
/*"PADICRAT" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"PADICRAT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PADICRAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"PADICRAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PADICRAT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"PADICRAT" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"PADICRAT" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"PADICRAT" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"}*/
/*"PADICRAT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PADICRAT" -> {"OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"PADICRAT" -> "PFECAT"
/*"PADICRAT" -> {"PADICCT"; "FPS"; "RNS"; "RADCAT"; "INS"; "CFCAT"}*/
/*"PADICRAT" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "FRETRCT"}*/

"PADICRC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PADICRC"]
/*"PADICRC" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"PADICRC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PADICRC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"PADICRC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PADICRC" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"PADICRC" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"PADICRC" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"PADICRC" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"}*/
/*"PADICRC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PADICRC" -> {"OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"PADICRC" -> "PFECAT"
/*"PADICRC" -> {"PADICCT"; "INT"; "INS"; "CFCAT"; "BOOLEAN"; "INS-"}*/
/*"PADICRC" -> {"LIST"; "ILIST"; "SINT"; "NNI"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PADICRC" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"PADICRC" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "FPS"; "RNS"}*/
/*"PADICRC" -> {"RADCAT"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "FRETRCT"}*/

"PARAMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PARAMP"]
"PARAMP" -> "PFECAT"
"PARAMP" -> "DIRPCAT"
/*"PARAMP" -> {"PRSPCAT"; "SETCATD"; "LOCPOWC"; "PLACESC"; "FIELD"; "EUCDOM"}*/
/*"PARAMP" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PARAMP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PARAMP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PARAMP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"PARAMP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"PARAMP" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PARAMP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "IXAGG"; "HOAGG"}*/
/*"PARAMP" -> {"AGG"; "TYPE"; "ELTAGG"; "ELTAB"; "DIFEXT"; "DIFRING"}*/
/*"PARAMP" -> {"FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PARAMP" -> {"OAMONS"; "VSPACE"; "UPSCAT"; "PSCAT"; "INT"; "LIST"; "ILIST"}*/
/*"PARAMP" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "CLAGG"; "FLAGG"}*/
/*"PARAMP" -> {"ELAGG"; "OM"; "NNI"; "OUTFORM"; "LSAGG-"}*/

"PCOMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PCOMP"]

```

```

/*"PCOMP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PCOMP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PCOMP" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"PCOMP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"PCOMP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"PCOMP" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"PCOMP" -> {"PATMAB"; "GCDDOM"}*/
"PCOMP" -> "PFECAT"
/*"PCOMP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"PCOMP" -> {"PID"; "FIELD"; "DIVRING"; "BOOLEAN"}*/

"PDECOMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PDECOMP"]
/*"PDECOMP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PDECOMP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PDECOMP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"PDECOMP" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"PDECOMP" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"PDECOMP" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"PDECOMP" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"PDECOMP" -> "PFECAT"
/*"PDECOMP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"PDECOMP" -> {"PID"; "FIELD"; "DIVRING"; "SINT"; "NNI"; "INT"; "BOOLEAN"}*/
/*"PDECOMP" -> "LIST"*/

"PF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PF"]
/*"PF" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"PF" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PF" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PF" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PF" -> {"UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"; "DIFRING"}*/
"PF" -> "FAXF"
/*"PF" -> {"XF"; "RETRACT"; "VSPACE"; "CHARZ"; "KONVERT"; "OAMONS"}*/
/*"PF" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "INS"; "OINTDOM"}*/
/*"PF" -> {"ORDRING"; "OAGROUP"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

"PFBR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFBR"]
"PFBR" -> "PFECAT"
/*"PFBR" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PFBR" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PFBR" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PFBR" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"PFBR" -> {"OASGP"; "ORDSET"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"PFBR" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PFBR" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "INT"; "PI"; "NNI"}*/
/*"PFBR" -> {"LIST"; "ILIST"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PFBR" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"PFBR" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "UPOLYC"; "DIFRING"}*/
/*"PFBR" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"PFBR" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FFIELDC"; "FPC"; "FINITE"}*/

"PFBRU" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFBRU"]
"PFBRU" -> "PFECAT"
/*"PFBRU" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PFBRU" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/

```

```

/*"PFBRU" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PFBRU" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UPOLYC"}*/
/*"PFBRU" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"PFBRU" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PFBRU" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "ELTAB"; "DIFRING"}*/
/*"PFBRU" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"; "NNI"}*/
/*"PFBRU" -> {"INT"; "SINT"; "PI"; "LIST"; "ILIST"; "BOOLEAN"; "LSAGG"}*/
/*"PFBRU" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"PFBRU" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"}*/
/*"PFBRU" -> {"STAGG-"; "ELAGG-"}*/

"PFORP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFORP"]
/*"PFORP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PFORP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"PFORP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"PFORP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"PFORP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
"PFORP" -> "DIRPCAT"
/*"PFORP" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"PFORP" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"PFORP" -> {"FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PFORP" -> {"ORDSET"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"PFORP" -> {"GCDDOM"; "UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"PFORP" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"PFORP" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"PFORP" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PFORP" -> {"RCAGG"; "LNAGG"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"}*/
/*"PFORP" -> {"VECTOR"; "SINT"; "PI"; "BOOLEAN"; "VECTCAT"; "A1AGG"}*/
/*"PFORP" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"}*/

"PFOTOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFOTOOLS"]
/*"PFOTOOLS" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PFOTOOLS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PFOTOOLS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"PFOTOOLS" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"PFOTOOLS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"PFOTOOLS" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"PFOTOOLS" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"PFOTOOLS" -> "PFECAT"
/*"PFOTOOLS" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"PFOTOOLS" -> {"PID"; "FIELD"; "DIVRING"; "INT"; "INS-"; "EUCDOM-"}*/
/*"PFOTOOLS" -> {"UFD-"; "GCDDOM-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PFOTOOLS" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "QFCAT"}*/
/*"PFOTOOLS" -> {"FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OM"}*/

"PFRPAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFRPAC"]
/*"PFRPAC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PFRPAC" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PFRPAC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PFRPAC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PFRPAC" -> {"CHARZ"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"PFRPAC" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PFRPAC" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"PFRPAC" -> "PFECAT"

```



```

/*"PFRPAC" -> {"UFD"; "QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"}*/
/*"PFRPAC" -> {"DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "TYPE"; "STEP"}*/
/*"PFRPAC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PFRPAC" -> {"REAL"; "UPOLYC"}*/

"PGCD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PGCD"]
/*"PGCD" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"PGCD" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"; "EUCDOM"}*/
/*"PGCD" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PGCD" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PGCD" -> {"MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"PGCD" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PGCD" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
"PGCD" -> "PFECAT"
/*"PGCD" -> {"UFD"; "PI"; "NNI"; "INT"; "MONOID-"; "ABELSG-"; "SGROUP-"}*/
/*"PGCD" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"PGCD" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"PGCD" -> {"FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"; "INS-"; "EUCDOM-"}*/
/*"PGCD" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"PGCD" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/
/*"PGCD" -> {"SINT"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "UPOLYC"}*/
/*"PGCD" -> {"DIFRING"; "DIFEXT"; "STEP"; "FIELD"; "DIVRING"}*/

"PINTERPA" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PINTERPA"]
/*"PINTERPA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PINTERPA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PINTERPA" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PINTERPA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PINTERPA" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"PINTERPA" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"PINTERPA" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"PINTERPA" -> {"KONVERT"; "PATMAB"}*/
"PINTERPA" -> "PFECAT"
/*"PINTERPA" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "LSAGG"; "STAGG"}*/
/*"PINTERPA" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"PINTERPA" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"PINTERPA" -> {"INT"; "LIST"; "ILIST"; "NNI"; "SINT"; "BOOLEAN"}*/

"PLEQN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PLEQN"]
/*"PLEQN" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PLEQN" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PLEQN" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PLEQN" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "ORDSET"}*/
/*"PLEQN" -> {"KONVERT"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "POLYCAT"}*/
/*"PLEQN" -> {"PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"PLEQN" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
"PLEQN" -> "PFECAT"
/*"PLEQN" -> {"UFD"; "BOOLEAN"; "QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"}*/
/*"PLEQN" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"PLEQN" -> {"STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "REAL"; "NNI"}*/
/*"PLEQN" -> {"INT"; "INS"; "CFCAT"; "OM"; "LIST"; "VECTOR"; "IVECTOR"}*/
/*"PLEQN" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"PLEQN" -> {"HOAGG"; "AGG"; "ELTAGG"; "CLAGG"; "SINT"; "ILIST"; "LSAGG-"}*/
/*"PLEQN" -> {"STAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"}*/

```

```

/*"PLEQN" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"PLEQN" -> "PI"*/

"PMPLCAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMPLCAT"]
/*"PLPKCRV" -> {"SETCATD"; "PRSPCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PLPKCRV" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PLPKCRV" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"PLPKCRV" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PLPKCRV" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "FAMR"; "AMR"}*/
/*"PLPKCRV" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
"PLPKCRV" -> "DIRPCAT"
/*"PLPKCRV" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PLPKCRV" -> {"ELTAGG"; "ELTAB"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"}*/
/*"PLPKCRV" -> {"LINEXP"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"PLPKCRV" -> {"OAMON"; "OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "BOOLEAN"}*/
/*"PLPKCRV" -> {"NNI"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"PLPKCRV" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"PLPKCRV" -> {"ILIST"; "LSAGG-"}*/

"PMPLCAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMPLCAT"]
/*"PMPLCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"PMPLCAT" -> {"OASGP"; "ORDSET"; "ABELMON"; "ABELSG"; "CABMON"; "RING"}*/
/*"PMPLCAT" -> {"RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "PATMAB"}*/
/*"PMPLCAT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"PMPLCAT" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"PMPLCAT" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PMPLCAT" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "GCDDOM"}*/
"PMPLCAT" -> "PFECAT"
/*"PMPLCAT" -> {"UFD"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"PMPLCAT" -> {"ELAGG-"; "FLAGG-"; "URAGG-"}*/

"PMQFCAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMQFCAT"]
/*"PMQFCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"; "RING"}*/
/*"PMQFCAT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"PMQFCAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PMQFCAT" -> {"MODULE"; "ENTIRER"; "PATMAB"; "KONVERT"; "QFCAT"; "FIELD"}*/
/*"PMQFCAT" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"PMQFCAT" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"PMQFCAT" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"PMQFCAT" -> {"FPATMAB"; "TYPE"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"}*/
/*"PMQFCAT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"}*/
/*"PMQFCAT" -> "CHARNZ"*/
"PMQFCAT" -> "PFECAT"

"PNTHEORY" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PNTHEORY"]
/*"PNTHEORY" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PNTHEORY" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PNTHEORY" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PNTHEORY" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PNTHEORY" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PNTHEORY" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"PNTHEORY" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFECAT"}*/
/*"PNTHEORY" -> {"REAL"; "CHARZ"; "STEP"; "INT"; "NNI"; "QFCAT"; "FIELD"}*/
/*"PNTHEORY" -> {"DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/

```

```

/*"PNTHEORY" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"PNTHEORY" -> {"TYPE"; "CHARNZ"}*/
"PNTHEORY" -> "PFECAT"
/*"PNTHEORY" -> {"BOOLEAN"; "OM"; "PI"; "SINT"; "INS-"; "EUCDOM-"}*/
/*"PNTHEORY" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"PNTHEORY" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/
/*"PNTHEORY" -> {"MONOID-"; "ORDSET-"; "ABELSG-"; "SGROUP-"}*/

"POLTOPOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLTOPOL"]
/*"POLTOPOL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"POLTOPOL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"POLTOPOL" -> {"LMODULE"; "ORDFIN"; "ORDSET"; "FINITE"; "LSAGG"}*/
/*"POLTOPOL" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"POLTOPOL" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"POLTOPOL" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"POLTOPOL" -> "ILIST"*/
"POLTOPOL" -> "DIRPCAT"
/*"POLTOPOL" -> {"FRETRACT"; "RETRACT"; "BMODULE"; "RMODULE"; "DIFEXT"}*/
/*"POLTOPOL" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "ALGEBRA"}*/
/*"POLTOPOL" -> {"MODULE"; "COMRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"POLTOPOL" -> {"OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"POLTOPOL" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/

"POLUTIL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLUTIL"]
/*"POLUTIL" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"POLUTIL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"POLUTIL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"POLUTIL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"POLUTIL" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"POLUTIL" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"}*/
/*"POLUTIL" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"POLUTIL" -> {"KONVERT"; "PATMAB"}*/
"POLUTIL" -> "PFECAT"
/*"POLUTIL" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "BOOLEAN"; "INT"}*/
/*"POLUTIL" -> {"LIST"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"POLUTIL" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"POLUTIL" -> {"ELAGG"; "OM"; "ILIST"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"POLUTIL" -> {"OAMON"; "OASGP"; "LSAGG-"; "STAGG-"}*/

"POLYCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=POLYCAT",
shape=ellipse]
/*"POLYCAT" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"POLYCAT" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"POLYCAT" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"POLYCAT" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"POLYCAT" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"POLYCAT" -> {"ENTIRER"; "FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"POLYCAT" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"POLYCAT" -> "PFECAT"
/*"POLYCAT" -> {"UFD"; "INT"; "LIST"; "ILIST"; "BOOLEAN"; "NNI"; "LSAGG"}*/
/*"POLYCAT" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"POLYCAT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"POLYCAT" -> {"OM"; "LSAGG-"; "STAGG-"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"POLYCAT" -> {"INS"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/

```

```

/*"POLYCAT" -> {"DIFRING"; "CFCAT"; "REAL"; "STEP"; "VECTCAT"; "A1AGG"}*/
/*"POLYCAT" -> {"VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"POLYCAT" -> {"UPOLYC"; "DIFEXT"; "FIELD"; "DIVRING"; "FPS"; "RNS"}*/
/*"POLYCAT" -> {"RADCAT"; "SEXCAT"}*/

"POLYCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=POLYCAT",
  shape=ellipse]
/*"POLYCAT-" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"POLYCAT-" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"}*/
/*"POLYCAT-" -> {"CABMON"; "POLYCAT"; "PDRING"; "RING"; "RNG"}*/
/*"POLYCAT-" -> {"ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"}*/
/*"POLYCAT-" -> {"AMR"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"POLYCAT-" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"POLYCAT-" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"POLYCAT-" -> {"LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"POLYCAT-" -> "PFECAT"
/*"POLYCAT-" -> {"UFD"; "INT"; "LIST"; "ILIST"; "BOOLEAN"; "NNI"}*/
/*"POLYCAT-" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"POLYCAT-" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"POLYCAT-" -> {"FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "VECTOR"}*/
/*"POLYCAT-" -> {"IVECTOR"; "IARRAY1"; "INS"; "EUCDOM"; "PID"}*/
/*"POLYCAT-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "DIFRING"; "CFCAT"}*/
/*"POLYCAT-" -> {"REAL"; "STEP"; "VECTCAT"; "A1AGG"; "VECTCAT-"}*/
/*"POLYCAT-" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "UPOLYC"}*/
/*"POLYCAT-" -> {"DIFEXT"; "FIELD"; "DIVRING"; "FPS"; "RNS"; "RADCAT"}*/
/*"POLYCAT-" -> "SEXCAT"*/

/* Note that this depends on POLYCAT in this layer but POLYCAT is */
/* part of the layer0 clique and thus guaranteed to be compiled. */
"POLYCATQ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLYCATQ"]
/*"POLYCATQ" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"POLYCATQ" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"POLYCATQ" -> {"RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"POLYCATQ" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"POLYCATQ" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"POLYCATQ" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"POLYCATQ" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"POLYCATQ" -> "GCDDOM"*/
"POLYCATQ" -> "PFECAT"
/*"POLYCATQ" -> {"UFD"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "UPOLYC"}*/
/*"POLYCATQ" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INT"; "LIST"}*/
/*"POLYCATQ" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/

"POLYLIFT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLYLIFT"]
/*"POLYLIFT" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"POLYLIFT" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"POLYLIFT" -> {"RING"; "RNG"; "ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"POLYLIFT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"POLYLIFT" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"POLYLIFT" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"POLYLIFT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"POLYLIFT" -> "GCDDOM"*/
"POLYLIFT" -> "PFECAT"
/*"POLYLIFT" -> {"UFD"; "BOOLEAN"}*/

```

```

"POLYROOT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLYROOT"]
/*"POLYROOT" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"POLYROOT" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"POLYROOT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"POLYROOT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"POLYROOT" -> {"MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"POLYROOT" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"POLYROOT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"POLYROOT" -> "GCDDOM"*/
"POLYROOT" -> "PFECAT"
/*"POLYROOT" -> {"UFD"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "INT"; "NNI"}*/
/*"POLYROOT" -> {"INS-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "DIFRING"}*/
/*"POLYROOT" -> {"CFCAT"; "REAL"; "STEP"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/

"POLY2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLY2"]
/*"POLY2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"POLY2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"POLY2" -> {"LMODULE"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"POLY2" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"POLY2" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"POLY2" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"POLY2" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"POLY2" -> "PFECAT"
/*"POLY2" -> "UFD"*/

"POLY2UP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=POLY2UP"]
/*"POLY2UP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"POLY2UP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"POLY2UP" -> {"LMODULE"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"POLY2UP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"POLY2UP" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"POLY2UP" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"POLY2UP" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"POLY2UP" -> "PFECAT"
/*"POLY2UP" -> "UFD"*/

"PRS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PRS"]
/*"PRS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PRS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"PRS" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PRS" -> {"ENTIRER"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"PRS" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PRS" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"PRS" -> "PFECAT"
/*"PRS" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"PRS" -> {"FIELD"; "DIVRING"; "NNI"; "INT"; "VECTOR"; "IVECTOR"}*/
/*"PRS" -> {"IARRAY1"; "VECTCAT-"; "BOOLEAN"; "PI"; "MONOID-"; "ABELMON-"}*/
/*"PRS" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"PRS" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "FINITE"; "A1AGG-"; "LIST"}*/
/*"PRS" -> {"ILIST"; "LSAGG-"; "STAGG-"}*/

"PSQFR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PSQFR"]
/*"PSQFR" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"; "OCAMON"}*/

```

```

/*"PSQFR" -> {"OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"; "GCDDOM"}*/
/*"PSQFR" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"PSQFR" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PSQFR" -> {"MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"PSQFR" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PSQFR" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
"PSQFR" -> "PFECAT"
/*"PSQFR" -> {"UFD"; "INT"; "LIST"; "ILIST"; "BOOLEAN"; "UPOLYC"; "ELTAB"}*/
/*"PSQFR" -> {"DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"}*/
/*"PSQFR" -> {"DIVRING"; "NNI"}*/

"PUSHVAR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PUSHVAR"]
/*"PUSHVAR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PUSHVAR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"PUSHVAR" -> {"LMODULE"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"PUSHVAR" -> {"ORDSET"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"PUSHVAR" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"PUSHVAR" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"PUSHVAR" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"}*/
/*"PUSHVAR" -> {"PATMAB"; "GCDDOM"}*/
"PUSHVAR" -> "PFECAT"
/*"PUSHVAR" -> {"UFD"; "NNI"; "INT"; "BOOLEAN"}*/

"QALGSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QALGSET"]
/*"QALGSET" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "GCDDOM"; "INTDOM"}*/
/*"QALGSET" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"QALGSET" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"QALGSET" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"QALGSET" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "POLYCAT"; "PDRING"}*/
/*"QALGSET" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"QALGSET" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"}*/
/*"QALGSET" -> "PATMAB"*/
"QALGSET" -> "PFECAT"
/*"QALGSET" -> {"UFD"; "EUCDOM"; "PID"; "INT"; "LIST"; "LSAGG"; "STAGG"}*/
/*"QALGSET" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"QALGSET" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"QALGSET" -> {"OM"; "ILIST"; "NNI"; "BOOLEAN"; "LSAGG-"; "STAGG-"}*/
/*"QALGSET" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"QALGSET" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"QALGSET" -> {"SETCAT-"; "BASTYPE-"}*/

"QFCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=QFCAT",
        shape=ellipse]
/*"QFCAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"QFCAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"QFCAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"QFCAT" -> {"MODULE"; "ENTIRER"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"QFCAT" -> {"UFD"; "DIVRING"; "RETRACT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"QFCAT" -> {"IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"}*/
/*"QFCAT" -> {"LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"}*/
/*"QFCAT" -> {"STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"QFCAT" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"QFCAT" -> "PFECAT"
/*"QFCAT" -> {"DFLOAT"; "INS"; "CFCAT"; "FPS"; "RNS"; "RADCAT"; "INT"}*/

```

```

"QFCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QFCAT",
        shape=ellipse]
/*"QFCAT-" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"QFCAT-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"QFCAT-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"QFCAT-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "FIELD"}*/
/*"QFCAT-" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"QFCAT-" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"QFCAT-" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"QFCAT-" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"}*/
/*"QFCAT-" -> {"ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"QFCAT-" -> {"OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"QFCAT-" -> "PFECAT"
/*"QFCAT-" -> {"DFLOAT"; "INS"; "CFCAT"; "FPS"; "RNS"; "RADCAT"; "INT"}*/

/* Note that QFCAT2 depends on QFCAT in the same layer but QFCAT is */
/* part of the bootstrap clique so it is guaranteed to be compiled */
"QFCAT2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=QFCAT2"]
/*"QFCAT2" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"QFCAT2" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"QFCAT2" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"QFCAT2" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "QFCAT"; "FIELD"}*/
/*"QFCAT2" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"QFCAT2" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"}*/
/*"QFCAT2" -> {"PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"QFCAT2" -> {"TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"}*/
/*"QFCAT2" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"}*/
/*"QFCAT2" -> "CHARNZ"*/
"QFCAT2" -> "PFECAT"

"RADIX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RADIX"]
/*"RADIX" -> {"QFCAT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"RADIX" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"RADIX" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"RADIX" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"RADIX" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"RADIX" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"RADIX" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"RADIX" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"RADIX" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"RADIX" -> "PFECAT"
/*"RADIX" -> {"INS"; "CFCAT"; "INT"; "NNI"; "LIST"; "OM"; "ILIST"}*/
/*"RADIX" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"RADIX" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"RADIX" -> "PI"*/
"RADIX" -> "STRING"
/*"RADIX" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"RADIX" -> {"FPS"; "RNS"; "RADCAT"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"RADIX" -> "FRETRACT"*/

"RATFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RATFACT"]
/*"RATFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RATFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/

```

```

/*"RATFACT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"RATFACT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"RATFACT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"RATFACT" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"RATFACT" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"RATFACT" -> "PFECAT"
/*"RATFACT" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"RATFACT" -> {"PID"; "FIELD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"RATFACT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"RATFACT" -> {"INT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "QFCAT"}*/
/*"RATFACT" -> {"FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "BOOLEAN"}*/

"RCFIELD" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RCFIELD"]
/*"RCFIELD" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"RCFIELD" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RCFIELD" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RCFIELD" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"RCFIELD" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"RCFIELD" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"RCFIELD" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"RCFIELD" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"RCFIELD" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"RCFIELD" -> {"TYPE"; "CHARNZ"}*/
"RCFIELD" -> "PFECAT"
/*"RCFIELD" -> {"FRETRCT"; "RADCAT"; "NNI"; "INT"; "LSAGG"; "STAGG"}*/
/*"RCFIELD" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"RCFIELD" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"RCFIELD" -> {"ILIST"; "LSAGG-"; "STAGG-"; "PI"}*/

"RCFIELD-" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RCFIELD"]
/*"RCFIELD-" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"RCFIELD-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RCFIELD-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"RCFIELD-" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"RCFIELD-" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"RCFIELD-" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"RCFIELD-" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"RCFIELD-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "QFCAT"; "FIELD"}*/
/*"RCFIELD-" -> {"DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/
/*"RCFIELD-" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"RCFIELD-" -> {"TYPE"; "CHARNZ"}*/
"RCFIELD-" -> "PFECAT"
/*"RCFIELD-" -> {"FRETRCT"; "RADCAT"; "NNI"; "INT"; "LSAGG"; "STAGG"}*/
/*"RCFIELD-" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"RCFIELD-" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"RCFIELD-" -> {"ILIST"; "LSAGG-"; "STAGG-"; "PI"}*/

"RDETR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RDETR"]
/*"RDETR" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"RDETR" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RDETR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"RDETR" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"RDETR" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"}*/
/*"RDETR" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/

```



```

/*"RDETR" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"RDETR" -> {"KONVERT"; "PATMAB"}*/
"RDETR" -> "PFECAT"
/*"RDETR" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "BOOLEAN"; "NNI"}*/
/*"RDETR" -> {"INT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"RDETR" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"}*/

"RDETRS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RDETRS"]
/*"RDETRS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"RDETRS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RDETRS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RDETRS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"RDETRS" -> {"DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"RDETRS" -> {"FAMR"; "AMR"; "CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"}*/
/*"RDETRS" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
"RDETRS" -> "PFECAT"
/*"RDETRS" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INT"; "LIST"}*/
/*"RDETRS" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"RDETRS" -> {"VECTOR"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"RDETRS" -> {"HOAGG"; "AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "IVECTOR"}*/
/*"RDETRS" -> {"IARRAY1"; "PI"; "NNI"}*/

"REALO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REALO"]
/*"REALO" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"REALO" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"REALO" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"REALO" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"REALO" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"REALO" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"REALO" -> {"PATMAB"; "GCDDOM"}*/
"REALO" -> "PFECAT"
/*"REALO" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"REALO" -> {"PID"; "FIELD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"REALO" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"REALO" -> {"INT"; "OM"; "NNI"; "LIST"; "ILIST"; "PI"; "BOOLEAN"}*/
/*"REALO" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"REALO" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"REALO" -> {"ABELMON-"; "SINT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"}*/
/*"REALO" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"REALO" -> {"ELTAGG"; "CLAGG"}*/

"REALOQ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REALOQ"]
/*"REALOQ" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"REALOQ" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"REALOQ" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"REALOQ" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"REALOQ" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"REALOQ" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"REALOQ" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"REALOQ" -> "PFECAT"
/*"REALOQ" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"REALOQ" -> {"PID"; "FIELD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"REALOQ" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"REALOQ" -> {"INT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "QFCAT"}*/

```

```

/*"REALOQ" -> {"FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/

"REALSOLV" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REALSOLV"]
/*"REALSOLV" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"REALSOLV" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"REALSOLV" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"REALSOLV" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"REALSOLV" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"REALSOLV" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"REALSOLV" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"REALSOLV" -> {"REAL"; "CHARZ"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"REALSOLV" -> {"AMR"; "CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
"REALSOLV" -> "PFECAT"
/*"REALSOLV" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/*"REALSOLV" -> {"PATAB"; "FPATMAB"; "TYPE"; "FPS"; "RNS"; "RADCAT"}*/

"RESRING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RESRING"]
/*"RESRING" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"RESRING" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RESRING" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"RESRING" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"RESRING" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"RESRING" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"RESRING" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"RESRING" -> "PFECAT"
/*"RESRING" -> {"UFD"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "OAMONS"}*/
/*"RESRING" -> {"OCAMON"; "OAMON"; "OASGP"; "INT"; "LIST"; "ILIST"}*/

"RETSOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RETSOL"]
/*"RETSOL" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"RETSOL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RETSOL" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"RETSOL" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"; "POLYCAT"}*/
/*"RETSOL" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"RETSOL" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"RETSOL" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"RETSOL" -> "PFECAT"
/*"RETSOL" -> {"UFD"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/

"RF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RF"]
/*"RF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"RF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"RF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"RF" -> {"ENTIRER"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"RF" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"RF" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"RF" -> "PFECAT"
/*"RF" -> {"UFD"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "FEVALAB"}*/
/*"RF" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"RF" -> {"STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"RF" -> {"OASGP"; "REAL"; "UPOLYC"}*/

"RFFACTOR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RFFACTOR"]
/*"RFFACTOR" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/

```

```

/*"RFFACTOR" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RFFACTOR" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RFFACTOR" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"RFFACTOR" -> {"INS"; "UFD"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"RFFACTOR" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"RFFACTOR" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"RFFACTOR" -> {"STEP"; "QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"}*/
/*"RFFACTOR" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"}*/
/*"RFFACTOR" -> {"PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"}*/
"RFFACTOR" -> "PFECAT"
/*"RFFACTOR" -> {"POLYCAT"; "FAMR"; "AMR"; "FRETRCT"; "FFIELDC"; "FPC"}*/
/*"RFFACTOR" -> "FINITE"*/

"RINTERP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RINTERP"]
/*"RINTERP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"RINTERP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RINTERP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"RINTERP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"RINTERP" -> {"ENTIRER"; "UFD"; "DIVRING"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"RINTERP" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"RINTERP" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"RINTERP" -> {"FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
/*"RINTERP" -> {"NNI"; "SINT"; "LSAGG-"; "STAGG-"; "POLYCAT"; "PDRING"}*/
/*"RINTERP" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"RINTERP" -> {"FLINEXP"; "LINEXP"; "PATMAB"}*/
"RINTERP" -> "PFECAT"
/*"RINTERP" -> {"PI"; "MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"}*/
/*"RINTERP" -> {"ABELSG-"; "SETCAT-"; "BASTYPE-"; "VECTOR"; "IVECTOR"}*/
/*"RINTERP" -> "IARRAY1"*/

"RMATCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RMATCAT"]
/*"RMATCAT" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"RMATCAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"}*/
/*"RMATCAT" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "MODULE"}*/
/*"RMATCAT" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"RMATCAT" -> "DIRPCAT"
/*"RMATCAT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FRETRCT"; "RETRACT"; "DIFEXT"}*/
/*"RMATCAT" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "FINITE"}*/
/*"RMATCAT" -> {"ALGEBRA"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"RMATCAT" -> {"OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"RMATCAT" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"RMATCAT" -> {"NNI"; "INT"; "BOOLEAN"; "SINT"}*/

"RMATCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RMATCAT"]
/*"RMATCAT-" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"RMATCAT-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"}*/
/*"RMATCAT-" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "MODULE"}*/
/*"RMATCAT-" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
"RMATCAT-" -> "DIRPCAT"
/*"RMATCAT-" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FRETRCT"; "RETRACT"}*/
/*"RMATCAT-" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"RMATCAT-" -> {"FINITE"; "ALGEBRA"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"RMATCAT-" -> {"OAMON"; "OASGP"; "ORDSET"; "OAMONS"; "VSPACE"}*/
/*"RMATCAT-" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/

```

```

/*"RMATCAT-" -> {"ENTIRER"; "UFD"; "DIVRING"; "NNI"; "INT"; "BOOLEAN"}*/
/*"RMATCAT-" -> "SINT"*/

"RCC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RCC"]
/*"RCC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"RCC" -> {"OAMON"; "OASGP"; "ORDSET"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"RCC" -> {"ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RCC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"RCC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"RCC" -> {"DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"RCC" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"RCC" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
"RCC" -> "PFECAT"
/*"RCC" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INT"; "LSAGG"; "STAGG"}*/
/*"RCC" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"RCC" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"}*/
/*"RCC" -> {"NNI"; "LSAGG-"; "STAGG-"}*/

"RCC-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RCC"]
/*"RCC-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDRING"; "OAGROUP"}*/
/*"RCC-" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "ABELMON"; "ABELSG"}*/
/*"RCC-" -> {"CABMON"; "ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"RCC-" -> {"LMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"RCC-" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"RCC-" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"}*/
/*"RCC-" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"RCC-" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"RCC-" -> {"KONVERT"; "PATMAB"}*/
"RCC-" -> "PFECAT"
/*"RCC-" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INT"; "LSAGG"}*/
/*"RCC-" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"RCC-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"RCC-" -> {"OM"; "LIST"; "ILIST"; "NNI"; "LSAGG-"; "STAGG-"}*/

"SCPKG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SCPKG"]
/*"SCPKG" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"SCPKG" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SCPKG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SCPKG" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"SCPKG" -> {"DIVRING"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SCPKG" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"SCPKG" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"}*/
/*"SCPKG" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "VECTOR"}*/
/*"SCPKG" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"; "INS"; "OINTDOM"}*/
/*"SCPKG" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"SCPKG" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"SCPKG" -> {"STEP"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"SCPKG" -> {"NNI"; "SINT"; "VECTCAT"; "A1AGG"; "POLYCAT"; "PDRING"}*/
/*"SCPKG" -> {"FAMR"; "AMR"; "CHARNZ"; "FRETRCT"; "FLINEXP"}*/
"SCPKG" -> "PFECAT"
/*"SCPKG" -> {"BOOLEAN"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PATAB"; "FPATMAB"}*/

"SHDP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SHDP"]
"SHDP" -> "DIRPCAT"

```

```

/*"SHDP" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SHDP" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"; "RETRACT"}*/
/*"SHDP" -> {"BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SHDP" -> {"RMODULE"; "DIFEXT"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"SHDP" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "FINITE"; "ALGEBRA"}*/
/*"SHDP" -> {"MODULE"; "COMRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"SHDP" -> {"OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"}*/
/*"SHDP" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"SHDP" -> {"BOOLEAN"; "NNI"; "INT"; "SINT"; "INS"; "OINTDOM"; "KONVERT"}*/
/*"SHDP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"SHP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SHP"]
/*"SHP" -> {"OINTDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SHP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SHP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"SHP" -> {"MODULE"; "ENTIRER"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"SHP" -> {"OASGP"; "ORDSET"; "NNI"; "INT"; "LIST"; "PI"; "ILIST"}*/
/*"SHP" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "SINT"}*/
/*"SHP" -> {"BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SHP" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"SHP" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"; "INS"}*/
/*"SHP" -> {"UFD"; "GCDDOM"; "EUCDOM"; "PID"; "DIFRING"; "RETRACT"}*/
/*"SHP" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "UPOLYC"}*/
/*"SHP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"SHP" -> "FLINEXP"*/
"SHP" -> "PFECAT"
/*"SHP" -> {"DIFEXT"; "FIELD"; "DIVRING"}*/

"SIGNRF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SIGNRF"]
/*"SIGNRF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SIGNRF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SIGNRF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SIGNRF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"}*/
/*"SIGNRF" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"SIGNRF" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"SIGNRF" -> {"KONVERT"; "PATMAB"}*/
"SIGNRF" -> "PFECAT"
/*"SIGNRF" -> {"UFD"; "INT"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/
/*"SIGNRF" -> {"FEVALAB"; "ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"}*/
/*"SIGNRF" -> {"TYPE"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SIGNRF" -> {"OAMON"; "OASGP"; "REAL"; "UPOLYC"; "LIST"; "ILIST"}*/

"SMITH" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SMITH"]
/*"SMITH" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"SMITH" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"SMITH" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"SMITH" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "FLAGG"; "LNAGG"}*/
/*"SMITH" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"SMITH" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "MATCAT"}*/
/*"SMITH" -> {"ARR2CAT"; "NNI"; "INT"; "SINT"; "BOOLEAN"; "PI"; "QFCAT"}*/
/*"SMITH" -> {"FIELD"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"; "DIFEXT"}*/
/*"SMITH" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "FPATMAB"}*/
/*"SMITH" -> {"PATMAB"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SMITH" -> {"OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/

```

```

"SMITH" -> "PFECAT"
/*"SMITH" -> {"VECTCAT"; "A1AGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"}*/

"SMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SMP"]
/*"SMP" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"SMP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"SMP" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"SMP" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"SMP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"SMP" -> "PFECAT"
/*"SMP" -> {"UFD"; "BOOLEAN"; "NNI"; "INT"; "PI"; "LSAGG"; "STAGG"}*/
/*"SMP" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"SMP" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"SMP" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"SMP" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"}*/
/*"SMP" -> {"AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "FIELD"; "EUCDOM"}*/
/*"SMP" -> {"PID"; "DIVRING"; "FPS"; "RNS"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SMP" -> {"OAMON"; "OASGP"; "REAL"; "RADCAT"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"SMP" -> {"CFCAT"; "STEP"; "UPOLYC"; "DIFEXT"}*/

"SMTS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SMTS"]
/*"SMTS" -> {"MTSCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SMTS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"SMTS" -> {"MONOID"; "LMODULE"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"SMTS" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"SMTS" -> {"ENTIRER"; "IEVALAB"; "EVALAB"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"SMTS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "ORDSET"; "POLYCAT"}*/
/*"SMTS" -> {"FAMR"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "KONVERT"}*/
/*"SMTS" -> {"PATMAB"; "GCDDOM"}*/
"SMTS" -> "PFECAT"
/*"SMTS" -> {"UFD"; "NNI"; "INT"; "BOOLEAN"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"SMTS" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"SMTS" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"SMTS" -> {"SETCAT-"; "BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"SMTS" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SMTS" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INS"; "EUCDOM"; "PID"}*/
/*"SMTS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SMTS" -> {"DIFRING"; "CFCAT"; "REAL"; "STEP"; "PI"; "SINT"; "FIELD"}*/
/*"SMTS" -> "DIVRING"*/

"SOLVEFOR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SOLVEFOR"]
/*"SOLVEFOR" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SOLVEFOR" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SOLVEFOR" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"SOLVEFOR" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"SOLVEFOR" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"SOLVEFOR" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SOLVEFOR" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"SOLVEFOR" -> "PFECAT"
/*"SOLVEFOR" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"SOLVEFOR" -> {"PID"; "FIELD"; "DIVRING"; "BOOLEAN"; "INT"; "LIST"}*/
/*"SOLVEFOR" -> {"ILIST"; "LSAGG-"; "STAGG-"; "NNI"; "PI"; "SINT"; "INS"}*/
/*"SOLVEFOR" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/

```

```

/"SOLVEFOR" -> {"OASGP"; "CFCAT"; "REAL"}*/

"SPLTREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SPLTREE"]
/*"SPLTREE" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"SPLTREE" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "INT"; "LIST"; "ILIST"}*/
/*"SPLTREE" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"SPLTREE" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"SPLTREE" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "BOOLEAN"; "LSAGG"}*/
/*"SPLTREE" -> {"STAGG"; "URAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SPLTREE" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"; "NNI"}*/
"SPLTREE" -> "STRING"
/*"SPLTREE" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

"STINPROD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STINPROD"]
/*"STINPROD" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"STINPROD" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"STINPROD" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"STINPROD" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "FIELD"; "EUCDOM"}*/
/*"STINPROD" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "QFCAT"; "RETRACT"}*/
/*"STINPROD" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"STINPROD" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"STINPROD" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"}*/
/*"STINPROD" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"STINPROD" -> {"OASGP"; "REAL"; "CHARNZ"}*/
"STINPROD" -> "PFECAT"

"STTF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STTF"]
/*"STTF" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"STTF" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"STTF" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "TRANFUN"; "TRIGCAT"}*/
/*"STTF" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"STTF" -> "STRING"
/*"STTF" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"; "A1AGG-"}*/
/*"STTF" -> {"ISTRING"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"STTF" -> {"URAGG-"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"STTF" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"STTF" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"STTF" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"STTF" -> {"STEP"; "NNI"; "PI"}*/

"STTFNC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=STTFNC"]
/*"STTFNC" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"STTFNC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"STTFNC" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "INT"}*/
"STTFNC" -> "STRING"
/*"STTFNC" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"STTFNC" -> "ISTRING"*/

"SUBRESP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SUBRESP"]
/*"SUBRESP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SUBRESP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SUBRESP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SUBRESP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UPOLYC"; "POLYCAT"}*/
/*"SUBRESP" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/

```

```

/*"SUBRESP" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SUBRESP" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"SUBRESP" -> "PFECAT"
/*"SUBRESP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"SUBRESP" -> {"PID"; "FIELD"; "DIVRING"; "NNI"; "INT"; "PRIMARR"}*/
/*"SUBRESP" -> {"LIST"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"SUBRESP" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "PI"; "ILIST"; "BOOLEAN"}*/

"SUBSPACE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SUBSPACE"]
/*"SUBSPACE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"SUBSPACE" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"SUBSPACE" -> {"LMODULE"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"SUBSPACE" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"SUBSPACE" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"SUBSPACE" -> {"BASTYPE-"; "NNI"; "BOOLEAN"; "PI"}*/
"SUBSPACE" -> "STRING"
/*"SUBSPACE" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"SUBSPACE" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SUBSPACE" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SUBSPACE" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/

"SUMRF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SUMRF"]
/*"SUMRF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SUMRF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"SUMRF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"SUMRF" -> {"MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"; "POLYCAT"}*/
/*"SUMRF" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"SUMRF" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"}*/
/*"SUMRF" -> {"PATMAB"; "GCDDOM"}*/
"SUMRF" -> "PFECAT"
/*"SUMRF" -> {"UFD"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/
/*"SUMRF" -> {"FEVALAB"; "ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"}*/
/*"SUMRF" -> {"TYPE"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SUMRF" -> {"OAMON"; "OASGP"; "REAL"}*/

"SUP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SUP"]
/*"SUP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SUP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SUP" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"SUP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"SUP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"SUP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"SUP" -> "PFECAT"
/*"SUP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"SUP" -> {"FIELD"; "DIVRING"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SUP" -> {"FPC"; "INT"; "LIST"; "NNI"; "PI"; "ILIST"; "BOOLEAN"}*/
/*"SUP" -> {"FFIELDC"; "FINITE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"SUP" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"SUP" -> {"FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "FPS"; "RNS"; "ORDRING"}*/
/*"SUP" -> {"OAGROUP"; "REAL"; "RADCAT"; "INS"; "OINTDOM"; "CFCAT"}*/

"SUPEXPR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SUPEXPR"]
/*"SUPEXPR" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SUPEXPR" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/

```



```

/*"SUPEXPR" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"SUPEXPR" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"SUPEXPR" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRACT"}*/
/*"SUPEXPR" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SUPEXPR" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"SUPEXPR" -> "PFECAT"
/*"SUPEXPR" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"SUPEXPR" -> {"PID"; "FIELD"; "DIVRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"SUPEXPR" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "FPS"; "RNS"; "ORDRING"}*/
/*"SUPEXPR" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"}*/
/*"SUPEXPR" -> {"INS"; "OINTDOM"; "CFCAT"}*/

"SUPFRACF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SUPFRACF"]
/*"SUPFRACF" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/*"SUPFRACF" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"SUPFRACF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SUPFRACF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SUPFRACF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"}*/
/*"SUPFRACF" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"}*/
/*"SUPFRACF" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"}*/
/*"SUPFRACF" -> "PATMAB"*/
"SUPFRACF" -> "PFECAT"
/*"SUPFRACF" -> {"UFD"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/
/*"SUPFRACF" -> {"FEVALAB"; "ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"}*/
/*"SUPFRACF" -> {"TYPE"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "REAL"}*/
/*"SUPFRACF" -> "UPOLYC"*/

"TANEXP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TANEXP"]
/*"TANEXP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"TANEXP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"TANEXP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"TANEXP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"TANEXP" -> {"UFD"; "DIVRING"; "INT"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"TANEXP" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"}*/
/*"TANEXP" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"TANEXP" -> {"KONVERT"; "PATMAB"}*/
"TANEXP" -> "PFECAT"
/*"TANEXP" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INS"; "OINTDOM"}*/
/*"TANEXP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"}*/
/*"TANEXP" -> {"REAL"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "SINT"}*/
/*"TANEXP" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"TANEXP" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "NNI"; "PI"; "MONOID-"}*/
/*"TANEXP" -> "ABELMON-"/>

```

```

"TEMUTL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TEMUTL"]
/*"TEMUTL" -> "INT"*/
"TEMUTL" -> "STRING"
/*"TEMUTL" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"TEMUTL" -> {"ISTRING"; "SRAGG-"}*/

"TEX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TEX"]
/*"TEX" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "NNI"}*/
"TEX" -> "STRING"
/*"TEX" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/

```

```

/*"TEX" -> {"ISTRING"; "ILIST"; "STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"}*/
/*"TEX" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"TEX" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "OM"; "PI"}*/
/*"TEX" -> {"BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"TEX" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "ORDFIN"}*/
/*"TEX" -> {"FINITE"; "SRAGG-"}*/

"TEXTFILE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TEXTFILE"]
/*"TEXTFILE" -> {"FILECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FNCAT"}*/
/*"TEXTFILE" -> {"STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"TEXTFILE" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"TEXTFILE" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "OM"}*/
"TEXTFILE" -> "STRING"
/*"TEXTFILE" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"TEXTFILE" -> {"A1AGG-"; "ISTRING"; "BOOLEAN"}*/

"TREE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TREE"]
/*"TREE" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"TREE" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "NNI"; "INT"; "LIST"}*/
/*"TREE" -> {"ILIST"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "LNAGG"}*/
/*"TREE" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"TREE" -> {"ORDSET"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"TREE" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"TREE" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"TREE" -> "PI"*/
"TREE" -> "STRING"
/*"TREE" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

"TWOFAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TWOFAC"]
/*"TWOFAC" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"TWOFAC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"TWOFAC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"TWOFAC" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"TWOFAC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIFRING"}*/
/*"TWOFAC" -> {"CHARNZ"; "FINITE"; "STEP"; "DIFRING"; "UPOLYC"}*/
/*"TWOFAC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "FRETRCT"}*/
/*"TWOFAC" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"TWOFAC" -> {"ORDSET"; "KONVERT"; "PATMAB"}*/
"TWOFAC" -> "PFECAT"
/*"TWOFAC" -> {"ELTAB"; "DIFEXT"; "INT"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"TWOFAC" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"TWOFAC" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "PI"; "NNI"}*/
/*"TWOFAC" -> {"LIST"; "ILIST"; "BOOLEAN"}*/
"TWOFAC" -> "FAXF"
/*"TWOFAC" -> {"XF"; "VSPACE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"TWOFAC" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"TWOFAC" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/

"UNIFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UNIFACT"]
/*"UNIFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"UNIFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"UNIFACT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"UNIFACT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"UNIFACT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/

```

```

/*"UNIFACT" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"UNIFACT" -> {"KONVERT"; "PATMAB"; "GCDDOM"}*/
"UNIFACT" -> "PFECAT"
/*"UNIFACT" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"UNIFACT" -> {"PID"; "FIELD"; "DIVRING"; "BOOLEAN"; "INT"; "LIST"}*/
/*"UNIFACT" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"UNIFACT" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"; "INS-"; "NNI"}*/
/*"UNIFACT" -> {"SINT"; "PI"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"UNIFACT" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"UNIFACT" -> {"ABELGRP-"; "ABELMON-"; "MONOID-"; "ORDSET-"; "ABELSG-"}*/
/*"UNIFACT" -> {"SGROUP-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"UNIFACT" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"UNIFACT" -> {"FLAGG"; "ELAGG"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"UNIFACT" -> {"FLAGG-"; "URAGG-"}*/

"UP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UP"]
/*"UP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"UP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UP" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"UP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"UP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"UP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"UP" -> "PFECAT"
/*"UP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"UP" -> {"FIELD"; "DIVRING"; "NNI"; "INT"; "FPS"; "RNS"; "ORDRING"}*/
/*"UP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"}*/
/*"UP" -> {"INS"; "OINTDOM"; "CFCAT"}*/

"UPCDEN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPCDEN"]
/*"UPCDEN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"UPCDEN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UPCDEN" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"UPCDEN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "QFCAT"; "FIELD"; "EUCDOM"}*/
/*"UPCDEN" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"UPCDEN" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"UPCDEN" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"UPCDEN" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"UPCDEN" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARZ"; "CHARNZ"}*/
"UPCDEN" -> "PFECAT"
/*"UPCDEN" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "FRETRCT"; "LSAGG"}*/
/*"UPCDEN" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"UPCDEN" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/

"UPDECOMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPDECOMP"]
/*"UPDECOMP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"UPDECOMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UPDECOMP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"UPDECOMP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "UPOLYC"}*/
/*"UPDECOMP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"UPDECOMP" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"UPDECOMP" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"UPDECOMP" -> "PFECAT"
/*"UPDECOMP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"UPDECOMP" -> {"PID"; "FIELD"; "DIVRING"; "NNI"; "INT"; "SINT"}*/

```

```

/*"UPDECOMP" -> {"BOOLEAN"; "LIST"}*/

"UPDIVP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPDIVP"]
/*"UPDIVP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"UPDIVP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"UPDIVP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"UPDIVP" -> {"MODULE"; "ENTIRER"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"UPDIVP" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"UPDIVP" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"UPDIVP" -> "PATMAB"; "GCDDOM"}*/
"UPDIVP" -> "PFECAT"
/*"UPDIVP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"UPDIVP" -> {"PID"; "FIELD"; "DIVRING"; "NNI"; "BOOLEAN"}*/

"UPMP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPMP"]
/*"UPMP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPMP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UPMP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"UPMP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"UPMP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"UPMP" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"UPMP" -> {"PATMAB"; "GCDDOM"}*/
"UPMP" -> "PFECAT"
/*"UPMP" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"UPMP" -> {"FIELD"; "DIVRING"; "NNI"; "INT"; "LIST"; "ILIST"; "MONOID-"}*/
/*"UPMP" -> "ABELMON-"}*/

"UPOLYC2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPOLYC2"]
/*"UPOLYC2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPOLYC2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"UPOLYC2" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"UPOLYC2" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"UPOLYC2" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"UPOLYC2" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"UPOLYC2" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"UPOLYC2" -> "PFECAT"
/*"UPOLYC2" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"UPOLYC2" -> {"PID"; "FIELD"; "DIVRING"; "BOOLEAN"}*/

"UPXSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=UPXSCAT"]
/*"UPXSCAT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"UPXSCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"UPXSCAT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UPXSCAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"UPXSCAT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"UPXSCAT" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"UPXSCAT" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"UPXSCAT" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"UPXSCAT" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"}*/
/*"UPXSCAT" -> {"FPATMAB"; "TYPE"; "CHARNZ"}*/
"UPXSCAT" -> "PFECAT"
/*"UPXSCAT" -> {"UPSCAT"; "PSCAT"; "AMR"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"UPXSCAT" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/

```

```

"UPSQFREE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UPSQFREE"]
/*"UPSQFREE" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"UPSQFREE" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UPSQFREE" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"UPSQFREE" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UPOLYC"; "POLYCAT"}*/
/*"UPSQFREE" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"UPSQFREE" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"UPSQFREE" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
"UPSQFREE" -> "PFECAT"
/*"UPSQFREE" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"UPSQFREE" -> {"PID"; "FIELD"; "DIVRING"; "FFIELDC"; "FPC"; "FINITE"}*/
/*"UPSQFREE" -> {"INT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"}*/
/*"UPSQFREE" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"UPSQFREE" -> {"ABELGRP-"; "NNI"; "BOOLEAN"; "LIST"; "PI"}*/

"VECTOR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VECTOR",
          shape=ellipse]
/*"VECTOR" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"VECTOR" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"VECTOR" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"VECTOR" -> {"INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"}*/
/*"VECTOR" -> {"SYMBOL"; "REF"; "ALIST"; "LIST"}*/
"VECTOR" -> "STRING"
/*"VECTOR" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "ISTRING"; "SRAGG-"}*/
/*"VECTOR" -> {"FLAGG-"; "LNAGG-"; "RADCAT"; "RING"; "RNG"; "ABELGRP"}*/
/*"VECTOR" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"VECTOR" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"VECTOR" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"VECTOR" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"VECTOR" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"VECTOR" -> {"CHARZ"; "STEP"; "OM"}*/

"VIEWDEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=VIEWDEF"]
/*"VIEWDEF" -> {"NNI"; "INT"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"VIEWDEF" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"VIEWDEF" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"VIEWDEF" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"VIEWDEF" -> {"OM"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"VIEWDEF" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"VIEWDEF" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"VIEWDEF" -> "BASTYPE-"/
"VIEWDEF" -> "STRING"
/*"VIEWDEF" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"VIEWDEF" -> {"SRAGG-"; "STRICAT"; "SRAGG"; "A1AGG"}*/

"VIEW2D" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VIEW2D"]
/*"VIEW2D" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "DFLOAT"; "INT"; "BOOLEAN"}*/
/*"VIEW2D" -> {"PI"; "NNI"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"VIEW2D" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"VIEW2D" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "VECTOR"; "IVECTOR"}*/
/*"VIEW2D" -> {"IARRAY1"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "SINT"}*/
"VIEW2D" -> "STRING"
/*"VIEW2D" -> {"CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "INS"}*/
/*"VIEW2D" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/

```

```

/*"VIEW2D" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"VIEW2D" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"VIEW2D" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"VIEW2D" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"VIEW2D" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "SRAGG-"}*/
/*"VIEW2D" -> {"STRICAT"; "SRAGG"; "ELAGG-"; "FLAGG-"; "FPS"; "RNS"}*/
/*"VIEW2D" -> {"FIELD"; "DIVRING"; "RADCAT"}*/

"VOID" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VOID"]
"VOID" -> "STRING"
/*"VOID" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"VOID" -> {"A1AGG-"; "ISTRING"}*/

"WEIER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=WEIER"]
/*"WEIER" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"WEIER" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"WEIER" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"WEIER" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"WEIER" -> {"UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "NNI"; "POLYCAT"}*/
/*"WEIER" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"WEIER" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"WEIER" -> {"KONVERT"; "PATMAB"}*/
"WEIER" -> "PFECAT"
/*"WEIER" -> {"MTSCAT"; "PSCAT"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"WEIER" -> {"HYPCAT"; "AHYP"; "ELEMFUN"}*/

"WP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=WP"]
/*"WP" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"WP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"WP" -> {"ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "OAMONS"; "OCAMON"}*/
/*"WP" -> {"OAMON"; "OASGP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "COMRING"}*/
/*"WP" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"WP" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"WP" -> "GCDDOM"*/
"WP" -> "PFECAT"
/*"WP" -> {"UFD"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"WP" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"WP" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"WP" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"WP" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"WP" -> {"BASTYPE-"; "NNI"; "BOOLEAN"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"}*/

```

1.4.14 Layer12

Depends on: DIOPS DPOLCAT FINRALG FRAC RMATCAT RRCC UPXSCAT FFSQFR
 PACRATC PLPKCRV

Used by next layer: DIAGG FRAMALG MDAGG SMATCAT UPXSCA
 — layer12 —

LAYER12=\

```

${OUT}/DIAGG.o    ${OUT}/DIAGG-.o    ${OUT}/DSMP.o    ${OUT}/EXPUPXS.o \
${OUT}/FACTRN.o   ${OUT}/FFFACTSE.o \
${OUT}/FRAMALG.o  ${OUT}/FRAMALG-.o  ${OUT}/INTFRSP.o  ${OUT}/LPARSPT.o \
${OUT}/MDAGG.o    ${OUT}/NPOLYGON.o \
${OUT}/ODPOL.o    ${OUT}/PLOT.o      ${OUT}/RFP.o      \
${OUT}/RMCAT2.o   ${OUT}/ROIRC.o     ${OUT}/SDPOL.o   \
${OUT}/SMATCAT.o  ${OUT}/SMATCAT-.o  ${OUT}/TUBETOOL.o ${OUT}/UPXSCCA.o \
${OUT}/UPXSCCA-.o \
layer12done

```

— layerpic —

```

/* layer 12 */
/* depends on: DIOPS DPOLCAT FFSQFR FINRALG FRAC RMCATCAT RRCC UPXSCAT */
/*
    PLPKCRV */

"DFLOAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DFLOAT",
          shape=ellipse]
/*"DFLOAT" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DFLOAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DFLOAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DFLOAT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DFLOAT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"DFLOAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"DFLOAT" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"DFLOAT" -> {"DIFRING"; "OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"DFLOAT" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "DFLOAT"; "INT"; "PI"; "NNI"}*/
/*"DFLOAT" -> {"FPS-"; "RNS-"; "FIELD-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"DFLOAT" -> {"DIVRING-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"DFLOAT" -> "MODULE-"/
"DFLOAT" -> "FRAC"
/*"DFLOAT" -> {"RING-"; "ABELGRP-"; "ABELMON-"; "INS"; "OINTDOM"; "LINEXP"}*/
/*"DFLOAT" -> {"CFCAT"; "STEP"; "INS"}*/

"DIAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=DIAGG"]
"DIAGG" -> "DIOPS"
/*"DIAGG" -> {"BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DIAGG" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/
/*"DIAGG" -> {"BOOLEAN"; "NNI"; "INT"}*/

"DIAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DIAGG"]
"DIAGG-" -> "DIOPS"
/*"DIAGG-" -> {"BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"DIAGG-" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/
/*"DIAGG-" -> {"BOOLEAN"; "NNI"; "INT"}*/

"DSMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DSMP"]
"DSMP" -> "DPOLCAT"
/*"DSMP" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DSMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"DSMP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/

```

```

/*"DSMP" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"DSMP" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"DSMP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"}*/
/*"DSMP" -> {"UFD"; "DIFEXT"; "DIFRING"; "DVARCAT"; "NNI"; "INT"; "FPS"}*/
/*"DSMP" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "ORDRING"}*/
/*"DSMP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"}*/
/*"DSMP" -> {"INS"; "OINTDOM"; "CFCAT"; "STEP"; "UPOLYC"; "ELTAB"}*/

"EXPUPXS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EXPUPXS"]
/*"EXPUPXS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"EXPUPXS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"EXPUPXS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"EXPUPXS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"EXPUPXS" -> {"UFD"; "DIVRING"; "ORDSET"}*/
"EXPUPXS" -> "UPXSCAT"
/*"EXPUPXS" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"}*/
/*"EXPUPXS" -> {"DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"EXPUPXS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "OAMON"; "OASGP"}*/
/*"EXPUPXS" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "KONVERT"}*/
/*"EXPUPXS" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"}*/
/*"EXPUPXS" -> {"INT"; "LIST"; "ILIST"; "BOOLEAN"; "OM"; "QFCAT"; "FEVALAB"}*/
/*"EXPUPXS" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"EXPUPXS" -> {"TYPE"; "PFECAT"}*/

"FACTRN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FACTRN"]
"FACTRN" -> "PACRATC"
/*"FACTRN" -> {"PACPERC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FACTRN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FACTRN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FACTRN" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FACTRN" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"}*/
/*"FACTRN" -> {"XF"; "VSPACE"; "FPC"; "CHARNZ"; "FINITE"; "UPOLYC"}*/
/*"FACTRN" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "FRETRCT"; "EVALAB"}*/
/*"FACTRN" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"FACTRN" -> {"PFECAT"}*/
/*"FACTRN" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "LSAGG"; "STAGG"}*/
/*"FACTRN" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"FACTRN" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"FACTRN" -> {"ILIST"; "LSAGG"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"FACTRN" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "QFCAT"}*/
/*"FACTRN" -> {"FEVALAB"; "PATAB"; "FPATMAB"}*/

"FFFACTSE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFFACTSE"]
/*"FFFACTSE" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FFFACTSE" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FFFACTSE" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FFFACTSE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FFFACTSE" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FFFACTSE" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"FFFACTSE" -> {"DIVRING"; "CHARNZ"; "FINITE"; "STEP"; "DIFRING"}*/
/*"FFFACTSE" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"FFFACTSE" -> {"CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"FFFACTSE" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"FFFACTSE" -> {"KONVERT"; "PATMAB"}*/

```



```

"FFFACTSE" -> "PFECAT"
"FFFACTSE" -> "FFSQFR"
/*"FFFACTSE" -> {"ELTAB"; "DIFEXT"}*/
/*"FFFACTSE" -> {"NNI"; "INT"; "PI"; "PRIMARR"; "A1AGG"; "FLAGG"}*/
/*"FFFACTSE" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FFFACTSE" -> {"ELTAGG"; "CLAGG"; "BOOLEAN"; "SINT"; "LIST"}*/
/*"FFFACTSE" -> {"ILIST"; "LSAGG"; "STAGG"; "INS"; "INS"}*/
/*"FFFACTSE" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FFFACTSE" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"}*/

"FRAMALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FRAMALG"]
"FRAMALG" -> "FINRALG"
/*"FRAMALG" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FRAMALG" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FRAMALG" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "CHARZ"; "CHARNZ"}*/
/*"FRAMALG" -> {"COMRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"FRAMALG" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"FRAMALG" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"FRAMALG" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"FRAMALG" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"FRAMALG" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"FRAMALG" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "INT"; "VECTOR"}*/
/*"FRAMALG" -> {"IVECTOR"; "IARRAY1"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"FRAMALG" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"FRAMALG" -> {"OM"; "NNI"; "PI"; "SINT"; "LIST"; "ILIST"}*/

"FRAMALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FRAMALG"]
"FRAMALG-" -> "FINRALG"
/*"FRAMALG-" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FRAMALG-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FRAMALG-" -> {"SGROUP"; "MONOID"; "LMODULE"; "MODULE"; "BMODULE"}*/
/*"FRAMALG-" -> {"RMODULE"; "CHARZ"; "CHARNZ"; "COMRING"; "UPOLYC"}*/
/*"FRAMALG-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "INTDOM"}*/
/*"FRAMALG-" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FRAMALG-" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"FRAMALG-" -> {"GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"FRAMALG-" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"FRAMALG-" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"FRAMALG-" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "INT"; "VECTOR"}*/
/*"FRAMALG-" -> {"IVECTOR"; "IARRAY1"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"FRAMALG-" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"FRAMALG-" -> {"OM"; "NNI"; "PI"; "SINT"; "LIST"; "ILIST"}*/

"INTFRSP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTFRSP"]
"INTFRSP" -> "PFORP"
"INTFRSP" -> "PARAMP"
"INTFRSP" -> "LISYSER"
/*"INTFRSP" -> {"PRSPCAT"; "SETCATD"; "LOCPOWC"; "PLACESC"}*/
/*"INTFRSP" -> {"DIVCAT"; "LOP"; "FIELD"; "EUCDOM"; "PID"}*/
/*"INTFRSP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTFRSP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"INTFRSP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INTFRSP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"INTFRSP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/

```

```

/*"INTFRSP" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"INTFRSP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"INTFRSP" -> {"DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"INTFRSP" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"}*/
/*"INTFRSP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "OAMONS"}*/
/*"INTFRSP" -> {"VSPACE"; "UPSCAT"; "PSCAT"; "FAMONC"; "INT"; "LIST"}*/
/*"INTFRSP" -> {"ILIST"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"INTFRSP" -> {"LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "VECTOR"}*/
/*"INTFRSP" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"}*/
/*"INTFRSP" -> {"LNAGG-"; "IXAGG-"; "LSAGG-"; "SINT"; "PI"; "STAGG-"}*/
/*"INTFRSP" -> {"ELAGG-"; "OUTFORM"}*/

"LPARSPT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LPARSPT"]
"LPARSPT" -> "PLPKCRV"
/*"LPARSPT" -> {"PFECAT"; "DIRPCAT"}*/
/*"LPARSPT" -> {"PRSPCAT"; "SETCATD"; "LOCPOWC"; "PLACESC"; "FIELD"}*/
/*"LPARSPT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"LPARSPT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"LPARSPT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LPARSPT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LPARSPT" -> {"UFD"; "DIVRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"LPARSPT" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"LPARSPT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"LPARSPT" -> {"PATMAB"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"LPARSPT" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"}*/
/*"LPARSPT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "OAMONS"}*/
/*"LPARSPT" -> {"VSPACE"; "UPSCAT"; "PSCAT"; "SINT"; "INT"; "LSAGG"}*/
/*"LPARSPT" -> {"STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "CLAGG"; "FLAGG"}*/
/*"LPARSPT" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "NNI"; "BOOLEAN"; "STEP"}*/
/*"LPARSPT" -> {"UPOLYC"; "PI"; "LSAGG-"; "STAGG-"; "OUTFORM"; "ELAGG-"}*/

"MDAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MDAGG"]
"MDAGG" -> "DIOPS"
/*"MDAGG" -> {"BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"MDAGG" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/

"NPOLYGON" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NPOLYGON"]
/*"NPOLYGON" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"NPOLYGON" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NPOLYGON" -> {"LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"NPOLYGON" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"NPOLYGON" -> {"ENTIRER"; "FRETRCT"; "RETRACT"}*/
"NPOLYGON" -> "DIRPCAT"
/*"NPOLYGON" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"NPOLYGON" -> {"ELTAGG"; "ELTAB"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"NPOLYGON" -> {"FLINEXP"; "LINEXP"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"NPOLYGON" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "OAMONS"; "VSPACE"}*/
/*"NPOLYGON" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "INT"}*/
/*"NPOLYGON" -> {"PI"; "NNI"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"NPOLYGON" -> {"RCAGG"; "LNAGG"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"}*/
/*"NPOLYGON" -> {"OM"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"NPOLYGON" -> {"BOOLEAN"}*/

"ODPOL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ODPOL"]

```

```

"ODPOL" -> "DPOLCAT"
/*"ODPOL" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ODPOL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ODPOL" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"ODPOL" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"ODPOL" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"ODPOL" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
/*"ODPOL" -> {"PFECAT"; "UFD"; "DIFEXT"; "DIFRING"; "DVARCAT"; "FPS"; "RNS"}*/
/*"ODPOL" -> {"FIELD"; "EUCDOM"; "PID"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"ODPOL" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"; "INS"; "OINTDOM"}*/
/*"ODPOL" -> {"CFCAT"; "STEP"; "UPOLYC"; "ELTAB"}*/

"PLOT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PLOT"]
/*"PLOT" -> {"PPCURVE"; "KOERCE"; "BOOLEAN"; "INT"; "DFLOAT"; "FPS"}*/
/*"PLOT" -> {"RNS-"; "FIELD-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"}*/
/*"PLOT" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
/*"PLOT" -> {"RING-"; "ABELGRP-"; "ABELMON-"; "MONOID-"; "ORDSET-"}*/
/*"PLOT" -> {"ABELSG-"; "SGROUP-"; "TRANFUN-"; "SETCAT-"; "ELEMFUN-"}*/
/*"PLOT" -> {"HYPCAT-"; "ATRIG-"; "TRIGCAT-"; "RADCAT-"; "RETRACT-"}*/
/*"PLOT" -> {"BASTYPE-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PLOT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PLOT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"}*/
/*"PLOT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PLOT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"PLOT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"PLOT" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "PTCAT"; "VECTCAT"}*/
/*"PLOT" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PLOT" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "LIST"}*/
/*"PLOT" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"}*/
/*"PLOT" -> {"NNI"; "PI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"PLOT" -> {"SINT"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"}*/
/*"PLOT" -> {"STEP"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"PLOT" -> {"ELEMFUN"; "SPFCAT"}*/
"PLOT" -> "FRAC"

"RFP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RFP"]
/*"RFP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"RFP" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RFP" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RFP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"RFP" -> {"INT"; "LIST"; "ILIST"; "PACPERC"; "FFIELDC"; "FPC"; "CHARNZ"}*/
/*"RFP" -> {"FINITE"; "STEP"; "DIFRING"; "PACFFC"; "UPOLYC"; "POLYCAT"}*/
/*"RFP" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"RFP" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"RFP" -> {"PFECAT"; "ELTAB"; "DIFEXT"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"RFP" -> {"GCDDOM-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"RFP" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"RFP" -> {"OM"; "LSAGG-"; "STAGG-"; "ELAGG-"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"RFP" -> {"FPATMAB"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"RFP" -> {"OASGP"; "REAL"; "INS"; "CFCAT"}*/
"RFP" -> "PACRATC"
/*"RFP" -> {"XF"; "VSPACE"; "BOOLEAN"; "NNI"; "FLAGG-"; "URAGG-"}*/

"RMCAT2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RMCAT2"]

```

```

/*"RMCAT2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RMCAT2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RMCAT2" -> {"DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"RMCAT2" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "FRETRCT"; "RETRACT"; "BMODULE"}*/
/*"RMCAT2" -> {"RMODULE"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"RMCAT2" -> {"FINITE"; "ALGEBRA"; "MODULE"; "COMRING"; "ORDRING"}*/
/*"RMCAT2" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "OAMONS"}*/
/*"RMCAT2" -> {"VSPACE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"RMCAT2" -> {"ENTIRER"; "UFD"; "DIVRING"}*/
"RMCAT2" -> "RMCATCAT"
/*"RMCAT2" -> {"NNI"; "INT"}*/

"ROIRC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ROIRC"]
"ROIRC" -> "RRCC"
/*"ROIRC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ROIRC" -> {"OAMON"; "OASGP"; "ORDSET"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"ROIRC" -> {"ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ROIRC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ROIRC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ROIRC" -> {"UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"ROIRC" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"ROIRC" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"ROIRC" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "NNI"; "INT"; "LIST"}*/
/*"ROIRC" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ROIRC" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"ROIRC" -> {"ILIST"; "PI"; "BOOLEAN"; "INS"; "OINTDOM"; "CFCAT"; "REAL"}*/

"SDPOL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SDPOL"]
"SDPOL" -> "DPOLCAT"
/*"SDPOL" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SDPOL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"SDPOL" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"SDPOL" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"SDPOL" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"SDPOL" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"SDPOL" -> {"GCDDOM"; "PFECAT"; "UFD"; "DIFEXT"; "DIFRING"; "DVARCAT"}*/
/*"SDPOL" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "ORDRING"}*/
/*"SDPOL" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"}*/
/*"SDPOL" -> {"INS"; "OINTDOM"; "CFCAT"; "STEP"; "UPOLYC"; "ELTAB"}*/

"SMATCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SMATCAT"]
/*"SMATCAT" -> {"DIFEXT"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"SMATCAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"SMATCAT" -> {"MONOID"; "LMODULE"; "DIFRING"; "PDRING"; "BMODULE"}*/
/*"SMATCAT" -> "RMODULE"*/
"SMATCAT" -> "RMCATCAT"
/*"SMATCAT" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "MODULE"}*/
/*"SMATCAT" -> {"COMRING"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"SMATCAT" -> {"ALGEBRA"; "DIRPCAT"; "IXAGG"; "ELTAGG"; "ELTAB"; "FINITE"}*/
/*"SMATCAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"SMATCAT" -> {"OAMONS"; "VSPACE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"SMATCAT" -> {"INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "NNI"; "INT"}*/
/*"SMATCAT" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "INS"; "OINTDOM"; "KONVERT"}*/
/*"SMATCAT" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "VECTCAT"}*/

```

```

/*"SMATCAT" -> {"A1AGG"; "FLAGG"; "LNAGG"; "CLAGG"; "LSAGG"; "STAGG"}*/
/*"SMATCAT" -> {"URAGG"; "RCAGG"; "ELAGG"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"SMATCAT" -> {"VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"SMATCAT" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "INS-"}*/

"SMATCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SMATCAT"]
/*"SMATCAT-" -> {"DIFEXT"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SMATCAT-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SMATCAT-" -> {"SGROUP"; "MONOID"; "LMODULE"; "DIFRING"; "PDRING"}*/
/*"SMATCAT-" -> {"BMODULE"; "RMODULE"}*/
"SMATCAT-" -> "RMATCAT"
/*"SMATCAT-" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "MODULE"}*/
/*"SMATCAT-" -> {"COMRING"; "FRETRACT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"SMATCAT-" -> {"ALGEBRA"; "DIRPCAT"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SMATCAT-" -> {"FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"SMATCAT-" -> {"OASGP"; "ORDSET"; "OAMONS"; "VSPACE"; "FIELD"}*/
/*"SMATCAT-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ENTIRER"}*/
/*"SMATCAT-" -> {"UFD"; "DIVRING"; "NNI"; "INT"; "VECTOR"; "IVECTOR"}*/
/*"SMATCAT-" -> {"IARRAY1"; "INS"; "OINTDOM"; "KONVERT"; "PATMAB"}*/
/*"SMATCAT-" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "VECTCAT"}*/
/*"SMATCAT-" -> {"A1AGG"; "FLAGG"; "LNAGG"; "CLAGG"; "LSAGG"; "STAGG"}*/
/*"SMATCAT-" -> {"URAGG"; "RCAGG"; "ELAGG"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"SMATCAT-" -> {"VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"SMATCAT-" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "INS-"}*/

"TUBETOOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TUBETOOL"]
/*"TUBETOOL" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"TUBETOOL" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"TUBETOOL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"TUBETOOL" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"TUBETOOL" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"TUBETOOL" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"TUBETOOL" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"TUBETOOL" -> {"INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"TUBETOOL" -> {"OM"; "INT"; "DFLOAT"; "FPS-"; "RNS-"; "FIELD-"; "LIST"}*/
/*"TUBETOOL" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"; "INTDOM-"}*/
/*"TUBETOOL" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
"TUBETOOL" -> "FRAC"
/*"TUBETOOL" -> {"RING-"; "ABELGRP-"; "ABELMON-"; "SINT"; "PI"; "NNI"}*/
/*"TUBETOOL" -> {"ILIST"; "BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"TUBETOOL" -> "URAGG-*/

"UPXSCCA" [color="#4488FF",href="bookvol10.2.pdf#nameddest=UPXSCCA"]
"UPXSCCA" -> "UPXSCAT"
/*"UPXSCCA" -> {"UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"; "ABELGRP"}*/
/*"UPXSCCA" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"UPXSCCA" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"UPXSCCA" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"UPXSCCA" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/
/*"UPXSCCA" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"UPXSCCA" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "FIELD"; "EUCDOM"; "PID"}*/
/*"UPXSCCA" -> {"GCDDOM"; "UFD"; "DIVRING"; "RETRACT"; "ULSCAT"}*/

"UPXSCCA-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UPXSCCA"]

```

```

"UPXSCCA-" -> "UPXSCAT"
/*"UPXSCCA-" -> {"UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"; "ABELGRP"}*/
/*"UPXSCCA-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"UPXSCCA-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"UPXSCCA-" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"UPXSCCA-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/
/*"UPXSCCA-" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"UPXSCCA-" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "FIELD"; "EUCDOM"; "PID"}*/
/*"UPXSCCA-" -> {"GCDDOM"; "UFD"; "DIVRING"; "RETRACT"; "ULSCAT"}*/

```

1.4.15 Layer13

Depends on: DIAGG FRAMALG MDAGG SMATCAT UPXSCCA RFP

Used by next layer: FSAGG KDAGG MSETAGG MONOGEN

— layer13 —

```

LAYER13=\
  ${OUT}/AFALGGRO.o ${OUT}/AFALGRES.o \
  ${OUT}/DPMM.o      ${OUT}/EFUPXS.o  ${OUT}/FFINTBAS.o  ${OUT}/FRIDEAL.o \
  ${OUT}/FRIDEAL2.o  ${OUT}/FRMOD.o   ${OUT}/FSAGG.o    ${OUT}/FSAGG-.o \
  ${OUT}/IBAT00L.o   ${OUT}/INTFACT.o ${OUT}/KDAGG.o    ${OUT}/KDAGG-.o \
  ${OUT}/MSETAGG.o   ${OUT}/MONOGEN.o ${OUT}/MONOGEN-.o ${OUT}/NFINTBAS.o \
  layer13done

```

— layerpic —

```

/* layer 13 */
/* depends on: DIAGG FRAMALG MDAGG SMATCAT UPXSCCA RFP*/

"AFALGGRO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=AFALGGRO"]
"AFALGGRO" -> "DIRPCAT"
"AFALGGRO" -> "PFECAT"
/*"AFALGGRO" -> {"PRSPCAT"; "SETCATD"; "PACFFC"; "PACPERC"; "FIELD"}*/
/*"AFALGGRO" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"AFALGGRO" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"AFALGGRO" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"AFALGGRO" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"AFALGGRO" -> {"UFD"; "DIVRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"AFALGGRO" -> {"CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"; "EVALAB"}*/
/*"AFALGGRO" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"AFALGGRO" -> {"PATMAB"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"AFALGGRO" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"}*/
/*"AFALGGRO" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"}*/
/*"AFALGGRO" -> {"SINT"; "OUTFORM"; "INT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"AFALGGRO" -> {"RCAGG"; "LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"AFALGGRO" -> {"ILIST"; "NNI"; "FFIELDC"; "FPC"; "STEP"; "PI"; "VECTOR"}*/
/*"AFALGGRO" -> {"MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"; "ORDFIN"}*/

```

```

/*"AFALGGRO" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "INS-"}*/
/*"AFALGGRO" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"}*/

"AFALGRES" [color="#FF4488",href="bookvol10.4.pdf#nameddest=AFALGRES"]
"AFALGRES" -> "RFP"
/*"AFALGRES" -> {"PRSPCAT"; "LOCPOWC"; "SETCATD"; "PACFFC"; "CHARZ"}*/
/*"AFALGRES" -> {"PACPERC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"AFALGRES" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"AFALGRES" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"AFALGRES" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"AFALGRES" -> {"UFD"; "DIVRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"AFALGRES" -> {"CHARNZ"; "FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"AFALGRES" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"AFALGRES" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"; "ELTAB"}*/
/*"AFALGRES" -> {"DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"AFALGRES" -> {"OASGP"; "OAMONS"; "VSPACE"; "UPOLYC"; "STEP"; "NNI"; "INT"}*/
/*"AFALGRES" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "FFIELDC"; "FPC"; "PI"}*/
/*"AFALGRES" -> {"VECTOR"; "OUTFORM"; "MONOID-"; "ABELMON-"; "ORDSET-"}*/
/*"AFALGRES" -> {"SGROUP-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"AFALGRES" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ELAGG-"; "FLAGG-"}*/
/*"AFALGRES" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "ENTIRER"; "FLINEXP"}*/
/*"AFALGRES" -> {"URAGG-"; "DIRPCAT"; "DIFEXT"; "OAMON"}*/

"DPMM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DPMM"]
/*"DPMM" -> {"DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"DPMM" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"DPMM" -> {"FRETRACT"; "RETRACT"; "BMODULE"; "LMODULE"; "ABELGRP"}*/
/*"DPMM" -> {"CABMON"; "ABELMON"; "ABELSG"; "RMODULE"; "DIFEXT"; "RING"}*/
/*"DPMM" -> {"RNG"; "SGROUP"; "MONOID"; "DIFRING"; "PDRING"; "FLINEXP"}*/
/*"DPMM" -> {"LINEXP"; "FINITE"; "ALGEBRA"; "MODULE"; "COMRING"; "ORDRING"}*/
/*"DPMM" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "OAMONS"}*/
/*"DPMM" -> {"VSPACE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"DPMM" -> {"ENTIRER"; "UFD"; "DIVRING"}*/
"DPMM" -> "SMATCAT"
/*"DPMM" -> {"RMATCAT"; "SINT"; "PI"; "NNI"; "INT"; "INS"; "OINTDOM"}*/
/*"DPMM" -> {"KONVERT"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/

"EFUPXS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EFUPXS"]
/*"EFUPXS" -> "PTRANFN"*/
"EFUPXS" -> "UPXSCCA"
/*"EFUPXS" -> {"UPXSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"; "ABELGRP"}*/
/*"EFUPXS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"EFUPXS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"EFUPXS" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"EFUPXS" -> {"ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"}*/
/*"EFUPXS" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "FIELD"}*/
/*"EFUPXS" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"EFUPXS" -> {"ULSCAT"; "NNI"; "INT"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"EFUPXS" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "KONVERT"}*/
/*"EFUPXS" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"; "OM"; "PI"}*/
/*"EFUPXS" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"}*/
/*"EFUPXS" -> {"A1AGG-"; "ISTRING"}*/

"FFINTBAS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFINTBAS"]

```

```

/*"FFINTBAS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"FFINTBAS" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FFINTBAS" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FFINTBAS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FFINTBAS" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"FFINTBAS" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FFINTBAS" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"FFINTBAS" -> {"PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"FFINTBAS" -> {"FIELD"; "DIVRING"}*/
"FFINTBAS" -> "FRAMALG"
/*"FFINTBAS" -> {"FINRAGL"; "INT"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"FFINTBAS" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "NNI"}*/

"FRIDEAL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FRIDEAL"]
/*"FRIDEAL" -> {"GROUP"; "MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"}*/
/*"FRIDEAL" -> {"KOERCE"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FRIDEAL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FRIDEAL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FRIDEAL" -> {"ENTIRER"; "QFCAT"; "FIELD"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"FRIDEAL" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"FRIDEAL" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"FRIDEAL" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"}*/
/*"FRIDEAL" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FRIDEAL" -> {"REAL"; "CHARZ"; "CHARNZ"; "PFECAT"; "UPOLYC"; "POLYCAT"}*/
/*"FRIDEAL" -> {"FAMR"; "AMR"; "FRETRCT"}*/
"FRIDEAL" -> "FRAMALG"
/*"FRIDEAL" -> {"FINRAGL"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"FRIDEAL" -> {"HOAGG"; "AGG"; "ELTAGG"; "CLAGG"; "INT"; "VECTOR"}*/
/*"FRIDEAL" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"; "BOOLEAN"}*/
/*"FRIDEAL" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "OM"; "LIST"}*/
/*"FRIDEAL" -> {"ILIST"; "LSAGG-"; "SINT"; "NNI"; "MONOID-"; "ABELMON-"}*/
/*"FRIDEAL" -> {"INS"; "CFCAT"; "STAGG-"; "ELAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"FRIDEAL" -> {"FINITE"; "PI"}*/

"FRIDEAL2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FRIDEAL2"]
/*"FRIDEAL2" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"FRIDEAL2" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FRIDEAL2" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FRIDEAL2" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FRIDEAL2" -> {"QFCAT"; "FIELD"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"FRIDEAL2" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"}*/
/*"FRIDEAL2" -> {"PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"}*/
/*"FRIDEAL2" -> {"FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"}*/
/*"FRIDEAL2" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"FRIDEAL2" -> {"CHARZ"; "CHARNZ"; "PFECAT"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"FRIDEAL2" -> {"AMR"; "FRETRCT"}*/
"FRIDEAL2" -> "FRAMALG"
/*"FRIDEAL2" -> {"FINRAGL"; "INS"; "CFCAT"; "OM"; "INT"; "VECTOR"; "IVECTOR"}*/
/*"FRIDEAL2" -> {"IARRAY1"}*/

"FRMOD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FRMOD"]
"FRMOD" -> "FRAMALG"
/*"FRMOD" -> {"FINRAGL"; "ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FRMOD" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/

```



```

/*"FRMOD" -> {"MONOID"; "LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "CHARZ"}*/
/*"FRMOD" -> {"CHARNZ"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FRMOD" -> {"ENTIRER"; "QFCAT"; "FIELD"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"FRMOD" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "DIFRING"}*/
/*"FRMOD" -> {"PDRING"; "FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"FRMOD" -> {"TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"}*/
/*"FRMOD" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "PFECAT"}*/
/*"FRMOD" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "FRETRCT"; "BOOLEAN"}*/
/*"FRMOD" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"FRMOD" -> {"AGG"; "ELTAGG"; "CLAGG"; "INT"; "VECTOR"; "IVECTOR"}*/
/*"FRMOD" -> {"IARRAY1"; "INS"; "CFCAT"; "OM"; "VECTCAT"; "A1AGG"; "NNI"}*/
/*"FRMOD" -> "PI"*/

"FSAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FSAGG"]
"FSAGG" -> "DIAGG"
/*"FSAGG" -> {"DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"FSAGG" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/
/*"FSAGG" -> {"SETAGG"; "FINITE"; "NNI"; "INT"; "BOOLEAN"; "SINT"; "PI"}*/
/*"FSAGG" -> {"INS-"; "ORDSET"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"FSAGG" -> {"RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"}*/
/*"FSAGG" -> {"ELAGG"; "OM"; "LSAGG-"}*/

"FSAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FSAGG"]
"FSAGG-" -> "DIAGG"
/*"FSAGG-" -> {"DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"FSAGG-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"FSAGG-" -> {"KONVERT"; "SETAGG"; "FINITE"; "NNI"; "INT"; "BOOLEAN"}*/
/*"FSAGG-" -> {"SINT"; "PI"; "INS-"; "ORDSET"; "LIST"; "ILIST"}*/
/*"FSAGG-" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"FSAGG-" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"}*/

"IBATool" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IBATool"]
/*"IBATool" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"IBATool" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"IBATool" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IBATool" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"IBATool" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"IBATool" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"IBATool" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"IBATool" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "FIELD"}*/
/*"IBATool" -> "DIVRING"*/
"IBATool" -> "FRAMALG"
/*"IBATool" -> {"FINRNLG"; "SINT"; "NNI"; "INT"; "PI"; "INS"; "OINTDOM"}*/
/*"IBATool" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"}*/
/*"IBATool" -> {"REAL"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"}*/
/*"IBATool" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"IBATool" -> {"TYPE"; "ELTAGG"; "CLAGG"}*/

"INTFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTFACT"]
/*"INTFACT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"INTFACT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"INTFACT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INTFACT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"INTFACT" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/

```

```

/*"INTFACT" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"INTFACT" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "INT"}*/
/*"INTFACT" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"INTFACT" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"INTFACT" -> {"ABELMON-"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"INTFACT" -> {"PI"; "NNI"; "SINT"; "BOOLEAN"}*/
"INTFACT" -> "MDAGG"
/*"INTFACT" -> {"DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"INTFACT" -> {"IEVALAB"; "CLAGG"}*/

"KDAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=KDAGG"]
"KDAGG" -> "DIAGG"
/*"KDAGG" -> {"DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"KDAGG" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/
/*"KDAGG" -> "BOOLEAN"*/

"KDAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=KDAGG"]
"KDAGG-" -> "DIAGG"
/*"KDAGG-" -> {"DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"KDAGG-" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"KDAGG-" -> {"KONVERT"; "BOOLEAN"}*/

"MSETAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MSETAGG"]
"MSETAGG" -> "MDAGG"
/*"MSETAGG" -> {"DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"MSETAGG" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"MSETAGG" -> {"KONVERT"; "SETAGG"}*/

"MONOGEN" [color="#4488FF",href="bookvol10.2.pdf#nameddest=MONOGEN"]
/*"MONOGEN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MONOGEN" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"MONOGEN" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"MONOGEN" -> "FRAMALG"
/*"MONOGEN" -> {"FINRNLG"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"MONOGEN" -> {"KONVERT"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"MONOGEN" -> {"FINITE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"MONOGEN" -> {"ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"MONOGEN" -> {"FFIELDC"; "FPC"; "STEP"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"MONOGEN" -> {"AMR"; "EVALAB"; "IEVALAB"; "ORDSET"; "PATMAB"; "PFECAT"}*/
/*"MONOGEN" -> {"ELTAB"; "NNI"; "INT"; "SINT"; "MONOID-"; "ABELMON-"}*/
/*"MONOGEN" -> {"ORDSET-"; "SGROUP-"; "PI"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"MONOGEN" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"MONOGEN" -> {"OASGP"; "CFCAT"; "REAL"}*/

"MONOGEN-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MONOGEN"]
/*"MONOGEN-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"MONOGEN-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MONOGEN-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"MONOGEN-" -> "FRAMALG"
/*"MONOGEN-" -> {"FINRNLG"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"MONOGEN-" -> {"KONVERT"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"MONOGEN-" -> {"FINITE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"MONOGEN-" -> {"ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"; "DIFRING"}*/
/*"MONOGEN-" -> {"PDRING"; "FFIELDC"; "FPC"; "STEP"; "UPOLYC"}*/

```

```

/*"MONOGEN-" -> {"POLYCAT"; "FAMR"; "AMR"; "EVALAB"; "IEVALAB"}*/
/*"MONOGEN-" -> {"ORDSET"; "PATMAB"; "PFECAT"; "ELTAB"; "NNI"; "INT"}*/
/*"MONOGEN-" -> {"SINT"; "MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"}*/
/*"MONOGEN-" -> {"PI"; "VECTOR"; "IVECTOR"; "IARRAY1"; "INS"; "OINTDOM"}*/
/*"MONOGEN-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"MONOGEN-" -> {"CFCAT"; "REAL"}*/

"NFINTBAS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NFINTBAS"]
/*"NFINTBAS" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NFINTBAS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"NFINTBAS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"NFINTBAS" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"NFINTBAS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"NFINTBAS" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"NFINTBAS" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"}*/
/*"NFINTBAS" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"NFINTBAS" -> {"FIELD"; "DIVRING"}*/
"NFINTBAS" -> "FRAMALG"
/*"NFINTBAS" -> {"FINRALG"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "INS"}*/
/*"NFINTBAS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"NFINTBAS" -> {"OASGP"; "CFCAT"; "REAL"; "OM"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"NFINTBAS" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"NFINTBAS" -> {"CLAGG"; "LIST"; "ILIST"; "PI"; "NNI"; "INS-"; "EUCDOM-"}*/

```

1.4.16 Layer14

Depends on: FSAGG KDAGG MSETAGG MONOGEN

Used by next layer: TBAGG

— layer14 —

```

LAYER14=\
  ${OUT}/BSD.o \
  ${OUT}/CCLASS.o  ${OUT}/CPIMA.o  ${OUT}/FSAGG2.o  ${OUT}/GALFACT.o \
  ${OUT}/IALGFACT.o  ${OUT}/IBACHIN.o  ${OUT}/MMLFORM.o  ${OUT}/NORMMA.o \
  ${OUT}/ODERED.o  ${OUT}/OMSAGG.o  ${OUT}/PERM.o  ${OUT}/PERMGRP.o \
  ${OUT}/PRIMES.o  ${OUT}/PRJALGPK.o \
  ${OUT}/PWFFINTB.o  ${OUT}/RDIST.o  ${OUT}/SAE.o \
  ${OUT}/SAEFACT.o  ${OUT}/SAERFFC.o  ${OUT}/SGCF.o  ${OUT}/SPACE3.o \
  ${OUT}/TBAGG.o  ${OUT}/TBAGG-.o  ${OUT}/VIEW3D.o  ${OUT}/WFFINTBS.o \
  layer14done

```

— layerpic —

```

/* layer 14 */
/* depends on: FSAGG KDAGG MSETAGG MONOGEN */

```

"BSD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BSD",

```

    shape=ellipse]
/*"BSD" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"; "INT"}*/
/*"BSD" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"BSD" -> {"IEVALAB"; "CLAGG"; "SETAGG"; "FINITE"; "OM"; "PATMAB"}*/
"BSD" -> "FSAGG"

"CHAR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CHAR",
    shape=ellipse]
/*"CHAR" -> {"ORDFIN"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "FINITE"}*/
/*"CHAR" -> {"SINT"; "INT"; "NNI"; "PRIMARR"; "A1AGG-"; "INS"; "UFD"}*/
/*"CHAR" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"CHAR" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CHAR" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"CHAR" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"CHAR" -> {"OASGP"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"CHAR" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "PI"}*/
"CHAR" -> "FSAGG"
/*"CHAR" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"CHAR" -> {"IEVALAB"; "CLAGG"; "SETAGG"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"CHAR" -> {"LIST"; "ISTRING"; "STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"}*/
/*"CHAR" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/

"CCLASS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CCLASS"]
/*"CCLASS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"}*/
"CCLASS" -> "FSAGG"
/*"CCLASS" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"CCLASS" -> {"IEVALAB"; "CLAGG"; "SETAGG"; "FINITE"; "ORDFIN"; "ORDSET"}*/
/*"CCLASS" -> {"INT"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"}*/
/*"CCLASS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "NNI"; "BOOLEAN"; "INS"; "UFD"}*/
/*"CCLASS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"CCLASS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CCLASS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"CCLASS" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"CCLASS" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"CCLASS" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "FLAGG-"; "LNAGG-"}*/
/*"CCLASS" -> {"BTAGG"; "LOGIC"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"CCLASS" -> {"ELTAGG"; "ELTAB"}*/

"CPIMA" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CPIMA"]
/*"CPIMA" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CPIMA" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"CPIMA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "UPOLYC"; "POLYCAT"}*/
/*"CPIMA" -> {"PDRING"; "FAMR"; "AMR"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"CPIMA" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"CPIMA" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"CPIMA" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"CPIMA" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
"CPIMA" -> "MONOGEN"
/*"CPIMA" -> {"FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"; "NNI"; "INT"}*/

"FSAGG2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSAGG2"]
/*"FSAGG2" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"FSAGG2" -> "FSAGG"
/*"FSAGG2" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/

```

```

/*"FSAGG2" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"; "SETAGG"; "FINITE"}*/

"GALFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GALFACT"]
/*"GALFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GALFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"GALFACT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"GALFACT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"GALFACT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"GALFACT" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"GALFACT" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"}*/
/*"GALFACT" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"GALFACT" -> {"FIELD"; "DIVRING"; "BOOLEAN"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"GALFACT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"GALFACT" -> {"OM"; "INT"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"GALFACT" -> {"INTDOM-"; "PI"; "NNI"; "OAMONS"}*/
"GALFACT" -> "FSAGG"
/*"GALFACT" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "CLAGG"}*/
/*"GALFACT" -> {"SETAGG"; "FINITE"; "SINT"; "LIST"; "ILIST"; "ALGEBRA-"}*/
/*"GALFACT" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"GALFACT" -> {"ABELMON-"; "FPS"; "RNS"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"GALFACT" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "LSAGG"; "STAGG"}*/
/*"GALFACT" -> {"URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "FLAGG"}*/
/*"GALFACT" -> {"ELAGG"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"GALFACT" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "MONOID-"; "ORDSET-"}*/
/*"GALFACT" -> {"ABELSG-"; "SGROUP-"; "CLAGG-"; "HOAGG-"; "AGG-"; "ELTAGG-"}*/
/*"GALFACT" -> {"SETCAT-"; "BASTYPE-"}*/

"IALGFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IALGFACT"]
/*"IALGFACT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IALGFACT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IALGFACT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"IALGFACT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"IALGFACT" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"}*/
/*"IALGFACT" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"IALGFACT" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"IALGFACT" -> {"ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"}*/
/*"IALGFACT" -> {"DIFRING"; "DIFEXT"; "STEP"}*/
"IALGFACT" -> "MONOGEN"
/*"IALGFACT" -> {"FRAMALG"; "FINRAGL"; "FINITE"; "FFIELDC"; "FPC"; "NNI"}*/
/*"IALGFACT" -> {"INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"IALGFACT" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"IALGFACT" -> {"FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"}*/

"IBACHIN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IBACHIN"]
/*"IBACHIN" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"IBACHIN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"IBACHIN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"IBACHIN" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"IBACHIN" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*"IBACHIN" -> {"STEP"; "DIFRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"IBACHIN" -> {"AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"IBACHIN" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"IBACHIN" -> {"PFECAT"; "ELTAB"; "DIFEXT"; "SINT"; "NNI"; "INT"; "LIST"}*/
/*"IBACHIN" -> {"ILIST"; "LSAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/

```

```

/*"IBACHIN" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"IBACHIN" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "PI"}*/
"IBACHIN" -> "MONOGEN"
/*"IBACHIN" -> {"FRAMALG"; "FINRALG"; "BOOLEAN"; "STAGG-"; "VECTCAT"}*/
/*"IBACHIN" -> "A1AGG"*/

"ISTRING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ISTRING",
           shape=ellipse]
/*"ISTRING" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"ISTRING" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"ISTRING" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"ISTRING" -> {"INT"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"}*/
/*"ISTRING" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "INS"; "UFD"; "GCDDOM"}*/
/*"ISTRING" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ISTRING" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ISTRING" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ISTRING" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ISTRING" -> {"OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"ISTRING" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "NNI"; "BOOLEAN"}*/
"ISTRING" -> "FSAGG"
/*"ISTRING" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"; "ORDFIN"}*/
/*"ISTRING" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"ISTRING" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"}*/
/*"ISTRING" -> {"AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "LSAGG"; "STAGG"}*/
/*"ISTRING" -> {"URAGG"; "RCAGG"; "ELAGG"}*/

"MMLFORM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MMLFORM"]
/*"MMLFORM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "NNI"; "STRING"}*/
/*"MMLFORM" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"}*/
/*"MMLFORM" -> {"ISTRING"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"MMLFORM" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"MMLFORM" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"MMLFORM" -> {"ORDSET"; "ELAGG"; "OM"; "STRICAT"; "SRAGG"; "A1AGG"; "PI"}*/
"MMLFORM" -> "FSAGG"
/*"MMLFORM" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"; "ORDFIN"}*/
/*"MMLFORM" -> {"BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"MMLFORM" -> "SRAGG"*/

"NORMMA" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NORMMA"]
/*"NORMMA" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NORMMA" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"NORMMA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"NORMMA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UPOLYC"; "POLYCAT"}*/
/*"NORMMA" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRACT"}*/
/*"NORMMA" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"NORMMA" -> {"ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"; "UFD"; "ELTAB"}*/
/*"NORMMA" -> {"DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"}*/
/*"NORMMA" -> "DIVRING"*/
"NORMMA" -> "MONOGEN"
/*"NORMMA" -> {"FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/

"ORDERED" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ORDERED"]
/*"ORDERED" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ORDERED" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/

```

```

/*"ORDERED" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ORDERED" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ORDERED" -> {"DIVRING"; "LODOCAT"; "OREPCAT"; "FRETRCT"; "RETRACT"}*/
/*"ORDERED" -> {"ELTAB"; "UPOLYC"; "POLYC"; "PDRING"; "FAMR"; "AMR"}*/
/*"ORDERED" -> {"CHARZ"; "CHARNZ"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"ORDERED" -> {"ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"; "DIFRING"; "DIFEXT"}*/
/*"ORDERED" -> "STEP"*/
"ORDERED" -> "MONOGEN"
/*"ORDERED" -> {"FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"; "VECTCAT"}*/
/*"ORDERED" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ORDERED" -> {"ELTAGG"; "CLAGG"; "NNI"; "INT"; "SINT"; "PI"}*/

"OMSAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OMSAGG"]
/*"OMSAGG" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"OMSAGG" -> "MSETAGG"
/*"OMSAGG" -> {"MDAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"OMSAGG" -> {"IEVALAB"; "CLAGG"; "KONVERT"; "SETAGG"; "PRQAGG"}*/

"PERM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PERM"]
/*"PERM" -> {"PERMCAT"; "GROUP"; "MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"}*/
/*"PERM" -> {"KOERCE"; "ORDSET"; "FINITE"; "INT"; "BOOLEAN"; "LIST"}*/
/*"PERM" -> {"ILIST"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PERM" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PERM" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PERM" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"PERM" -> {"OAMON"; "OASGP"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"PERM" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "LSAGG-"}*/
/*"PERM" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "SINT"}*/
/*"PERM" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PERM" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"PERM" -> {"CLAGG"; "FLAGG"; "ELAGG"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
"PERM" -> "FSAGG"
/*"PERM" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "NNI"; "INS-"; "EUCDOM-"}*/
/*"PERM" -> {"UFD-"; "GCDDOM-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"PERM" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "VECTCAT-"}*/
/*"PERM" -> {"A1AGG-"; "PI"}*/

"PERMGRP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PERMGRP"]
/*"PERMGRP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"; "BOOLEAN"}*/
/*"PERMGRP" -> {"LIST"; "ILIST"; "SINT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"PERMGRP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PERMGRP" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PERMGRP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"PERMGRP" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PERMGRP" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"PERMGRP" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "LSAGG-"}*/
/*"PERMGRP" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "LSAGG"}*/
/*"PERMGRP" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"PERMGRP" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"PERMGRP" -> {"FLAGG"; "ELAGG"; "OAMONS"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"PERMGRP" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"PERMGRP" -> {"BASTYPE-"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"PERMGRP" -> {"A1AGG-"; "VECTCAT"; "A1AGG"}*/
"PERMGRP" -> "FSAGG"

```

```

/*"PERMGRP" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"; "PI"}*/
/*"PERMGRP" -> {"PERMCAT"; "GROUP"}*/

"PRIMES" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PRIMES"]
/*"PRIMES" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PRIMES" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PRIMES" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PRIMES" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"PRIMES" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"PRIMES" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"PRIMES" -> {"REAL"; "CHARZ"; "STEP"; "PI"; "NNI"; "INT"; "MONOID-"}*/
/*"PRIMES" -> {"ABELSG-"; "SGROUP-"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"PRIMES" -> {"VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"PRIMES" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"PRIMES" -> {"LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"PRIMES" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"PRIMES" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "SINT"}*/
/*"PRIMES" -> {"BOOLEAN"; "VECTCAT"; "A1AGG"}*/
"PRIMES" -> "FSAGG"
/*"PRIMES" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"; "LSAGG-"}*/
/*"PRIMES" -> "STAGG-*/

"PRJALGPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PRJALGPK"]
"PRJALGPK" -> "AFALGGRO"
/*"PRJALGPK" -> {"PRSPCAT"; "LOCPOWC"; "SETCATD"; "PACFFC"; "PACPERC"; "RFP"}*/
/*"PRJALGPK" -> {"PLPKCRV"; "INTERGB"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PRJALGPK" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PRJALGPK" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PRJALGPK" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PRJALGPK" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"PRJALGPK" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"PRJALGPK" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PRJALGPK" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"PRJALGPK" -> {"DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"PRJALGPK" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"}*/
/*"PRJALGPK" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"}*/
/*"PRJALGPK" -> {"SINT"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"PRJALGPK" -> {"LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"}*/
/*"PRJALGPK" -> {"NNI"; "PI"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"PRJALGPK" -> {"LSAGG-"; "STAGG-"; "FFIELDC"; "FPC"; "STEP"; "MONOID-"}*/
/*"PRJALGPK" -> {"ABELMON-"; "ORDSET-"; "SGROUP-"; "ELAGG-"; "FLAGG-"}*/
/*"PRJALGPK" -> {"URAGG-"; "OUTFORM"}*/

"PWFFINTB" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PWFFINTB"]
/*"PWFFINTB" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PWFFINTB" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PWFFINTB" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PWFFINTB" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PWFFINTB" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"PWFFINTB" -> {"FINITE"; "STEP"; "DIFRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"PWFFINTB" -> {"FAMR"; "AMR"; "CHARZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"PWFFINTB" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"PWFFINTB" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFEXT"}*/
"PWFFINTB" -> "MONOGEN"

```



```

/*"PWFFINTB" -> {"FRAMALG"; "FINRALG"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"PWFFINTB" -> {"FPATMAB"; "TYPE"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PWFFINTB" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "OM"; "INT"; "LIST"}*/
/*"PWFFINTB" -> {"ILIST"; "LSAGG-"; "STAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PWFFINTB" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"PWFFINTB" -> {"CLAGG"; "FLAGG"; "ELAGG"; "PI"; "NNI"; "INS"; "CFCAT"}*/
/*"PWFFINTB" -> {"VECTCAT"; "A1AGG"}*/

"RDIST" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RDIST"]
/*"RDIST" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INS"; "UFD"; "GCDDOM"}*/
/*"RDIST" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"RDIST" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RDIST" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"RDIST" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RDIST" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"RDIST" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"RDIST" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"RDIST" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"RDIST" -> {"VECTCAT"; "A1AGG"}*/
"RDIST" -> "FSAGG"
/*"RDIST" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"}*/

"SAE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SAE"]
/*"SAE" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SAE" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SAE" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"SAE" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"SAE" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"SAE" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
/*"SAE" -> {"PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"SAE" -> {"PID"; "FIELD"; "DIVRING"}*/
"SAE" -> "MONOGEN"
/*"SAE" -> {"FRAMALG"; "FINRALG"; "FINITE"; "FFIELD"; "FPC"; "NNI"; "INT"}*/
/*"SAE" -> {"BOOLEAN"; "SINT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"}*/
/*"SAE" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"SAE" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "VECTCAT"}*/
/*"SAE" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SAE" -> {"ELTAGG"; "CLAGG"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"}*/
/*"SAE" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SAE" -> {"REAL"; "PI"; "INS"; "CFCAT"; "OAMONS"}*/

"SAEFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SAEFACT"]
/*"SAEFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SAEFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SAEFACT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"SAEFACT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"SAEFACT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"SAEFACT" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SAEFACT" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"}*/
/*"SAEFACT" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"SAEFACT" -> {"FIELD"; "DIVRING"}*/
"SAEFACT" -> "MONOGEN"
/*"SAEFACT" -> {"FRAMALG"; "FINRALG"; "FINITE"; "FFIELD"; "FPC"; "INS"}*/
/*"SAEFACT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/

```

```

/*"SAEFACT" -> {"CFCAT"; "REAL"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"}*/
/*"SAEFACT" -> "TYPE"*/

"SAERFFC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SAERFFC"]
/*"SAERFFC" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SAERFFC" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SAERFFC" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"SAERFFC" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"SAERFFC" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"SAERFFC" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SAERFFC" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"}*/
/*"SAERFFC" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"SAERFFC" -> {"FIELD"; "DIVRING"}*/
"SAERFFC" -> "MONOGEN"
/*"SAERFFC" -> {"FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"; "INS"}*/
/*"SAERFFC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"SAERFFC" -> {"OASGP"; "CFCAT"; "REAL"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"SAERFFC" -> {"FPATMAB"; "TYPE"}*/

"SGCF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SGCF"]
/*"SGCF" -> {"INT"; "SINT"; "NNI"; "LIST"; "ILIST"; "LSAGG-"; "VECTOR"}*/
/*"SGCF" -> {"IVECTOR"; "IARRAY1"; "BOOLEAN"; "STAGG-"; "VECTCAT"}*/
/*"SGCF" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SGCF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"SGCF" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "VECTCAT-"; "A1AGG-"}*/
/*"SGCF" -> {"FLAGG-"; "LNAGG-"; "IXAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"SGCF" -> {"RCAGG"; "ELAGG"; "OM"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"SGCF" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"SGCF" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SGCF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"SGCF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"SGCF" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"SGCF" -> {"STEP"; "ELAGG-"; "URAGG-"}*/
"SGCF" -> "FSAGG"
/*"SGCF" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"}*/

"SPACE3" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SPACE3"]
/*"SPACE3" -> {"SPACEC"; "SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"}*/
/*"SPACE3" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"SPACE3" -> {"MONOID"; "LMODULE"; "BOOLEAN"; "INT"; "LIST"; "LSAGG"}*/
/*"SPACE3" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SPACE3" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SPACE3" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/
/*"SPACE3" -> {"ILIST"; "NNI"; "PI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"SPACE3" -> {"URAGG-"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
"SPACE3" -> "FSAGG"
/*"SPACE3" -> {"DIAGG"; "DIOPS"; "BGAGG"; "SETAGG"; "FINITE"}*/

"TBAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=TBAGG"]
"TBAGG" -> "KDAGG"
/*"TBAGG" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"TBAGG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"TBAGG" -> {"CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"TBAGG" -> {"BOOLEAN"; "NNI"; "INT"; "LIST"; "ILIST"}*/

```

```

"TBAGG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TBAGG"]
"TBAGG-" -> "KDAGG"
/*"TBAGG-" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"TBAGG-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"TBAGG-" -> {"CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"TBAGG-" -> {"BOOLEAN"; "NNI"; "INT"; "LIST"; "ILIST"}*/

"VIEW3D" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VIEW3D"]
/*"VIEW3D" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"; "DFLOAT"}*/
/*"VIEW3D" -> {"BOOLEAN"; "PI"; "FPS-"; "RNS-"; "FIELD-"; "EUCDOM-"; "UFD-"}*/
/*"VIEW3D" -> {"GCDDOM-"; "DIVRING-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"VIEW3D" -> {"ORDRING-"; "MODULE-"; "FRAC"; "RING-"; "ABELGRP-"}*/
/*"VIEW3D" -> {"ABELMON-"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"}*/
/*"VIEW3D" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"VIEW3D" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"VIEW3D" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"VIEW3D" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"VIEW3D" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"VIEW3D" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"VIEW3D" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"}*/
/*"VIEW3D" -> "OM"*/
"VIEW3D" -> "FSAGG"
/*"VIEW3D" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"VIEW3D" -> {"IEVALAB"; "CLAGG"; "SETAGG"; "FINITE"; "LSAGG"; "STAGG"}*/
/*"VIEW3D" -> {"URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"VIEW3D" -> {"FLAGG"; "ELAGG"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"VIEW3D" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"VIEW3D" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "INS"; "OINTDOM"}*/
/*"VIEW3D" -> {"LINEXP"; "CFCAT"; "STEP"; "SRAGG-"; "STRICAT"; "SRAGG"}*/
/*"VIEW3D" -> "A1AGG"*/

"WFFINTBS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=WFFINTBS"]
/*"WFFINTBS" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"WFFINTBS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"WFFINTBS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"WFFINTBS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"WFFINTBS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"WFFINTBS" -> {"FINITE"; "STEP"; "DIFRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"WFFINTBS" -> {"FAMR"; "AMR"; "CHARZ"; "FRETRACT"; "RETRACT"; "EVALAB"}*/
/*"WFFINTBS" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"WFFINTBS" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFEXT"; "FRAMALG"}*/
/*"WFFINTBS" -> {"FINRNLG"; "INT"; "LIST"; "ILIST"; "SINT"; "PI"; "NNI"}*/
/*"WFFINTBS" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"; "A1AGG"}*/
/*"WFFINTBS" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"WFFINTBS" -> {"ELTAGG"; "CLAGG"}*/
"WFFINTBS" -> "MONOGEN"

```

1.4.17 Layer15

Depends on: TBAGG

Used by next layer: ALIST

— layer15 —

```
LAYER15=\
  ${OUT}/ALIST.o  ${OUT}/EQTBL.o  ${OUT}/GSTBL.o  ${OUT}/HASHTBL.o \
  ${OUT}/INTABL.o  ${OUT}/INTFTBL.o  ${OUT}/INTPACK.o  ${OUT}/IPF.o \
  ${OUT}/KAFILE.o  ${OUT}/PATRES.o  ${OUT}/PDEPACK.o  ${OUT}/STBL.o \
  ${OUT}/STRTBL.o  ${OUT}/TABLE.o  ${OUT}/TBCMPK.o \
layer15done
```

— layerpic —

```
/* layer 15 */
/* depends on: TBAGG */

"ALAGG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ALAGG",
        shape=ellipse]
"ALAGG" -> "TBAGG"
/*"ALAGG" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ALAGG" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"ALAGG" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "LSAGG"; "STAGG"}*/
/*"ALAGG" -> {"URAGG"; "RCAGG"; "LNAGG"; "FLAGG"; "ORDSET"; "ELAGG"}*/

"ALIST" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ALIST"]
/*"ALIST" -> "ALAGG"*/
"ALIST" -> "TBAGG"
/*"ALIST" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ALIST" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"ALIST" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "LSAGG"; "STAGG"}*/
/*"ALIST" -> {"URAGG"; "RCAGG"; "LNAGG"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"ALIST" -> {"INT"; "LIST"; "ILIST"; "OM"; "INS"; "UFD"; "GCDDOM"}*/
/*"ALIST" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ALIST" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ALIST" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"ALIST" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ALIST" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"ALIST" -> {"CHARZ"; "STEP"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"ALIST" -> {"URAGG-"; "LNAGG-"; "BOOLEAN"; "STRING"; "CHAR"; "SINT"}*/
/*"ALIST" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

"EQTBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EQTBL"]
"EQTBL" -> "TBAGG"
/*"EQTBL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"EQTBL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"EQTBL" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "ORDSET"}*/

"FFIELDC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FFIELDC",
           shape=ellipse]
```

```

/*"FFIELDC" -> {"FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFIELDC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFIELDC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFIELDC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFIELDC" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"}*/
/*"FFIELDC" -> {"DIFRING"; "PI"; "NNI"; "INT"; "LIST"; "ILIST"; "VECTCAT"}*/
/*"FFIELDC" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FFIELDC" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"FFIELDC" -> {"ORDSET"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"FFIELDC" -> {"A1AGG-"; "BOOLEAN"; "SINT"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"FFIELDC" -> "OASGP"*/
"FFIELDC" -> "TBAGG"
/*"FFIELDC" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "INS-"; "INS"; "OINTDOM"}*/
/*"FFIELDC" -> {"ORDRING"; "OAGROUP"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"FFIELDC" -> {"REAL"; "CHARZ"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"FFIELDC" -> {"AMR"; "FRETRCT"; "FLINEXP"; "PFECAT"; "DIFEXT"}*/

"FFIELDC-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFIELDC",
            shape=ellipse]
/*"FFIELDC-" -> {"FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFIELDC-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FFIELDC-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FFIELDC-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FFIELDC-" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"FFIELDC-" -> {"CHARNZ"; "FINITE"; "STEP"; "DIFRING"; "PI"; "NNI"}*/
/*"FFIELDC-" -> {"INT"; "LIST"; "ILIST"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"FFIELDC-" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"FFIELDC-" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"FFIELDC-" -> {"ORDSET"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"FFIELDC-" -> {"A1AGG-"; "BOOLEAN"; "SINT"; "OAMONS"; "OCAMON"}*/
/*"FFIELDC-" -> {"OAMON"; "OASGP"}*/
"FFIELDC-" -> "TBAGG"
/*"FFIELDC-" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "INS-"; "INS"}*/
/*"FFIELDC-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "RETRACT"; "LINEXP"}*/
/*"FFIELDC-" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "UPOLYC"}*/
/*"FFIELDC-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "FRETRCT"}*/
/*"FFIELDC-" -> {"FLINEXP"; "PFECAT"; "DIFEXT"}*/

"GSTBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GSTBL"]
/*"GSTBL" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"GSTBL" -> "TBAGG"
/*"GSTBL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"GSTBL" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"}*/
/*"GSTBL" -> {"ELTAB"; "ORDSET"}*/

"HASHTBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HASHTBL"]
"HASHTBL" -> "TBAGG"
/*"HASHTBL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"HASHTBL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"HASHTBL" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "ORDSET"}*/

"INTABL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INTABL"]
"INTABL" -> "TBAGG"
/*"INTABL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/

```

```

/*"INTABL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"INTABL" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "ORDSET"}*/

"INTFTBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INTFTBL"]
"INTFTBL" -> "TBAGG"
/*"INTFTBL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"INTFTBL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"INTFTBL" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"}*/

"INTPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTPACK"]
/*"INTPACK" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"INTPACK" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"INTPACK" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INTPACK" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INTPACK" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"INTPACK" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"INTPACK" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"; "OM"; "TRANFUN"}*/
/*"INTPACK" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "LSAGG"}*/
/*"INTPACK" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"INTPACK" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"INTPACK" -> {"FLAGG"; "ELAGG"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "DFLOAT"}*/
/*"INTPACK" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "SINT"}*/
/*"INTPACK" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"INTPACK" -> {"FLAGG-"; "LNAGG-"; "BOOLEAN"; "STAGG-"}*/
"INTPACK" -> "TBAGG"
/*"INTPACK" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "NNI"; "INS-"; "PI"}*/
/*"INTPACK" -> {"MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"; "ABELSG-"}*/
/*"INTPACK" -> {"SETCAT-"; "BASTYPE-"; "STRICAT"; "SRAGG"; "A1AGG"}*/
/*"INTPACK" -> "SPFCAT"*/

"IPF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IPF"]
/*"IPF" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"IPF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"IPF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"IPF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"IPF" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"}*/
/*"IPF" -> {"DIFRING"; "FAXF"; "XF"; "RETRACT"; "VSPACE"; "CHARZ"; "KONVERT"}*/
/*"IPF" -> {"PI"; "NNI"; "INT"; "LIST"; "BOOLEAN"; "OAMONS"; "OCAMON"}*/
/*"IPF" -> {"OAMON"; "OASGP"; "ORDSET"}*/
"IPF" -> "TBAGG"
/*"IPF" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"IPF" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "SINT"}*/
/*"IPF" -> {"INS-"; "ILIST"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"IPF" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "VECTOR"; "IVECTOR"}*/
/*"IPF" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"IPF" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"IPF" -> "BASTYPE-*/

"KAFILE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=KAFILE"]
/*"KAFILE" -> {"FILECAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"KAFILE" -> "TBAGG"
/*"KAFILE" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"KAFILE" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"}*/
/*"KAFILE" -> {"ELTAB"; "FNCAT"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/

```

```

/*"KAFILE" -> {"LIST"; "INT"; "PRIMARR"; "A1AGG-"; "ISTRING"; "LSAGG"}*/
/*"KAFILE" -> {"STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "FLAGG"; "ORDSET"}*/
/*"KAFILE" -> {"ELAGG"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"; "STRICAT"}*/
/*"KAFILE" -> {"SRAGG"; "A1AGG"; "ORDFIN"; "FINITE"}*/

"PATRES" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PATRES"]
/*"PATRES" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDSET"; "BOOLEAN"; "ALAGG"}*/
"PATRES" -> "TBAGG"
/*"PATRES" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PATRES" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"}*/
/*"PATRES" -> {"ELTAB"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"PATRES" -> {"FLAGG"; "ELAGG"; "INT"; "LIST"; "ILIST"}*/

"PDEPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PDEPACK"]
/*"PDEPACK" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"}*/
/*"PDEPACK" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "ILIST"}*/
"PDEPACK" -> "TBAGG"
/*"PDEPACK" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PDEPACK" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"PDEPACK" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "NNI"; "SYMBOL"}*/
/*"PDEPACK" -> {"REF"; "ALIST"; "FLAGG-"; "LNAGG-"; "INS-"; "PI"; "FPS"}*/
/*"PDEPACK" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"PDEPACK" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PDEPACK" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PDEPACK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"PDEPACK" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"PDEPACK" -> {"REAL"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"}*/
/*"PDEPACK" -> {"OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"PDEPACK" -> "ELEMFUN"*/

"STBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=STBL"]
/*"STBL" -> {"SETCAT"; "BASTYPE"; "KOERCE"}*/
"STBL" -> "TBAGG"
/*"STBL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"STBL" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"}*/
/*"STBL" -> {"ELTAB"; "ORDSET"}*/

"STRTBL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=STRTBL"]
"STRTBL" -> "TBAGG"
/*"STRTBL" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"STRTBL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"STRTBL" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "STRICAT"; "SRAGG"}*/
/*"STRTBL" -> {"A1AGG"; "FLAGG"; "LNAGG"; "ORDSET"; "OM"; "ORDFIN"; "FINITE"}*/

"TABLE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TABLE"]
"TABLE" -> "TBAGG"
/*"TABLE" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"TABLE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"TABLE" -> {"KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "ALAGG"; "LSAGG"}*/
/*"TABLE" -> {"STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "FLAGG"; "ORDSET"}*/
/*"TABLE" -> "ELAGG"*/

"TBCMPPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TBCMPPK"]
/*"TBCMPPK" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "BOOLEAN"; "NNI"; "INT"}*/

```

```

/*"TBCMPK" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"}*/
/*"TBCMPK" -> {"A1AGG-"; "ISTRING"}*/
"TBCMPK" -> "TBAGG"
/*"TBCMPK" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"TBCMPK" -> {"EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"}*/
/*"TBCMPK" -> "ELTAB"*/

```

1.4.18 Layer16

Depends on: ALIST

Used by next layer: ACF COMPCAT FFCAT FRNAALG FS OC QUATCAT RPOLCAT
UTSCAT

— layer16 —

```

LAYER16=\
  ${OUT}/ACF.o      ${OUT}/ACF-.o      ${OUT}/ACPLOT.o    ${OUT}/ANTISYM.o \
  ${OUT}/ANY.o      ${OUT}/ASP12.o     ${OUT}/ASP27.o     ${OUT}/ASP28.o \
  ${OUT}/ASP30.o    ${OUT}/ASP33.o     ${OUT}/ASP49.o     ${OUT}/ASP55.o \
  ${OUT}/ASP7.o     ${OUT}/ASP78.o     ${OUT}/ASP8.o      ${OUT}/ASP9.o \
  ${OUT}/ATTRBUT.o  ${OUT}/BLUPPACK.o \
  ${OUT}/BOP.o      ${OUT}/BOP1.o      ${OUT}/COMMONOP.o \
  ${OUT}/COMPCAT.o  ${OUT}/COMPCAT-.o  ${OUT}/DRAW.o      ${OUT}/DRAWCFUN.o \
  ${OUT}/DROPT.o    ${OUT}/DROPT0.o    ${OUT}/D01ANFA.o   ${OUT}/D01ASFA.o \
  ${OUT}/D03AGNT.o  ${OUT}/EP.o      ${OUT}/E04AGNT.o   ${OUT}/FCPAK1.o \
  ${OUT}/FEXPR.o    ${OUT}/FFCAT.o      ${OUT}/FFCAT-.o    ${OUT}/FFCGP.o \
  ${OUT}/FFNBP.o    ${OUT}/FFP.o      ${OUT}/FLOAT.o     ${OUT}/FPARFRAC.o \
  ${OUT}/FR.o       ${OUT}/FRNAALG.o   ${OUT}/FRNAALG-.o  ${OUT}/FS.o \
  ${OUT}/FS-.o      ${OUT}/FST.o      ${OUT}/FUNCTION.o  ${OUT}/GDMP.o \
  ${OUT}/GOPT.o     ${OUT}/GOPT0.o    ${OUT}/HACKPI.o    ${OUT}/IDEAL.o \
  ${OUT}/INFCLCT.o \
  ${OUT}/INFORM.o   ${OUT}/INFORM1.o  ${OUT}/IPRNTPK.o   ${OUT}/IR.o \
  ${OUT}/ISUPS.o    ${OUT}/KERNEL.o  ${OUT}/LIB.o       ${OUT}/LMDICT.o \
  ${OUT}/LODO.o     ${OUT}/LODOOPS.o  ${OUT}/MATRIX.o    ${OUT}/MKFLCFN.o \
  ${OUT}/MSET.o     ${OUT}/M3D.o      ${OUT}/NAGC02.o    ${OUT}/NAGC05.o \
  ${OUT}/NAGC06.o   ${OUT}/NAGD01.o    ${OUT}/NAGD02.o    ${OUT}/NAGD03.o \
  ${OUT}/NAGE01.o   ${OUT}/NAGE02.o    ${OUT}/NAGE04.o    ${OUT}/NAGF07.o \
  ${OUT}/NAGS.o     ${OUT}/NAGSP.o    ${OUT}/NREP.o      ${OUT}/NSDPS.o \
  ${OUT}/NUMFMT.o   \
  ${OUT}/OC.o       ${OUT}/OC-.o      ${OUT}/ODEPACK.o   ${OUT}/ODERAT.o \
  ${OUT}/OMERR.o    ${OUT}/OMERRK.o   ${OUT}/OPTPACK.o   ${OUT}/OSI.o \
  ${OUT}/OVAR.o     ${OUT}/PACOFF.o    ${OUT}/PACRAT.o \
  ${OUT}/PATTERN.o  ${OUT}/PLCS.o      ${OUT}/PMKERNEL.o  ${OUT}/PMSYM.o \
  ${OUT}/POLY.o     ${OUT}/PRIMELT.o  ${OUT}/QALGSET2.o  ${OUT}/QEQUAT.o \
  ${OUT}/QUATCAT.o  ${OUT}/QUATCAT-.o  ${OUT}/RECLOS.o    ${OUT}/REP1.o \
  ${OUT}/RESULT.o   ${OUT}/RFFACT.o    ${OUT}/RMATRIX.o   ${OUT}/ROMAN.o \
  ${OUT}/ROUTINE.o  ${OUT}/RPOLCAT.o   ${OUT}/RPOLCAT-.o  ${OUT}/RULECOLD.o \
  ${OUT}/SAOS.o     ${OUT}/SCELL.o \
  ${OUT}/SEGBIND.o  ${OUT}/SEM.o       ${OUT}/SET.o       ${OUT}/SPECOUT.o \
  ${OUT}/SQMATRIX.o ${OUT}/SWITCH.o  ${OUT}/SYMS.o      ${OUT}/SYMTAB.o \
  ${OUT}/SYSSOLP.o  ${OUT}/UTSCAT.o    ${OUT}/UTSCAT-.o   ${OUT}/VARIABLE.o \

```



```

layer16done

—————

— layerpic —

/* layer 16 */
/* depends on: ALIST */

"ACF" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ACF"]
/*"ACF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ACF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ACF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ACF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ACF" -> {"DIVRING"; "RADCAT"; "SYMBOL"; "INT"; "REF"}*/
"ACF" -> "ALIST"
/*"ACF" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ACF" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"ACF" -> {"NNI"; "PI"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"ACF" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"ACF" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"ACF" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "LSAGG"; "STAGG"}*/
/*"ACF" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"}*/
/*"ACF" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"}*/
/*"ACF" -> {"ELAGG-"; "URAGG-"; "BOOLEAN"}*/

"ACF-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ACF"]
/*"ACF-" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ACF-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ACF-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ACF-" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ACF-" -> {"ENTIRER"; "UFD"; "DIVRING"; "RADCAT"; "SYMBOL"; "INT"}*/
/*"ACF-" -> "REF"*/
"ACF-" -> "ALIST"
/*"ACF-" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ACF-" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"ACF-" -> {"NNI"; "PI"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"ACF-" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"ACF-" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"ACF-" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"}*/
/*"ACF-" -> {"STEP"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"ACF-" -> {"AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"ACF-" -> {"FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"ACF-" -> {"URAGG-"; "BOOLEAN"}*/

"ACPLOT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ACPLOT"]
/*"ACPLOT" -> {"PPCURVE"; "KOERCE"; "PI"; "NNI"; "INT"; "DFLOAT"; "FPS"}*/
/*"ACPLOT" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ACPLOT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ACPLOT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ACPLOT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ACPLOT" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ACPLOT" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/

```

```

/*"ACPLOT" -> {"CHARZ"; "BOOLEAN"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ACPLOT" -> {"CFCAT"; "STEP"; "QFCAT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"ACPLOT" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"ACPLOT" -> {"TYPE"; "CHARNZ"; "PFECAT"; "FPS-"; "RNS-"; "LIST"; "ILIST"}*/
/*"ACPLOT" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "OM"}*/
/*"ACPLOT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"ACPLOT" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "SYMBOL"; "REF"}*/
"ACPLOT" -> "ALIST"
/*"ACPLOT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ACPLOT" -> {"ISTRING"; "SRAGG-"; "LNAGG-"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"ACPLOT" -> {"FRETRCT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"ACPLOT" -> {"ELEMFUN"; "SPFCAT"; "RCAGG-"; "IXAGG-"; "PTCAT"; "VECTCAT"}*/
/*"ACPLOT" -> "A1AGG"*/

"ANTISYM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ANTISYM"]
/*"ANTISYM" -> {"LALG"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ANTISYM" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ANTISYM" -> {"LMODULE"; "RETRACT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ANTISYM" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"ANTISYM" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"ANTISYM" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "BOOLEAN"}*/
/*"ANTISYM" -> {"NNI"; "SINT"; "LSAGG-"; "STAGG-"; "PI"; "INS-"; "EUCDOM-"}*/
/*"ANTISYM" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"ANTISYM" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "SYMBOL"; "REF"}*/
"ANTISYM" -> "ALIST"
/*"ANTISYM" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"ANTISYM" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"ANY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ANY"]
/*"ANY" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"; "INT"; "REF"}*/
"ANY" -> "ALIST"
/*"ANY" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ANY" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"ANY" -> "LSAGG-"/

"ASP12" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP12"]
/*"ASP12" -> {"FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"ASP12" -> "ALIST"
/*"ASP12" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP12" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"ASP12" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"ASP12" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"ASP12" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ASP12" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"ASP12" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"ASP12" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"ASP12" -> {"CHARZ"; "STEP"; "OM"}*/

"ASP27" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP27"]
/*"ASP27" -> {"FMC"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"; "RNS"}*/
/*"ASP27" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP27" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP27" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP27" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

```

```

/*"ASP27" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP27" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"ASP27" -> {"SINT"; "PI"; "NNI"; "INT"; "SYMBOL"; "REF"}*/
"ASP27" -> "ALIST"
/*"ASP27" -> {"LIST"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ASP27" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FMTC"}*/

"ASP28" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP28"]
/*"ASP28" -> {"FMC"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"; "RNS"}*/
/*"ASP28" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP28" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP28" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP28" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"ASP28" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP28" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"ASP28" -> {"SINT"; "PI"; "NNI"; "INT"; "SYMBOL"; "REF"}*/
"ASP28" -> "ALIST"
/*"ASP28" -> {"LIST"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ASP28" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FMTC"; "VECTOR"}*/

"ASP30" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP30"]
/*"ASP30" -> {"FMC"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"; "RNS"}*/
/*"ASP30" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP30" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP30" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP30" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"ASP30" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP30" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"ASP30" -> {"INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"ASP30" -> {"SYMBOL"; "INT"; "REF"}*/
"ASP30" -> "ALIST"
/*"ASP30" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP30" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "OM"}*/

"ASP33" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP33"]
/*"ASP33" -> {"FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"ASP33" -> "ALIST"
/*"ASP33" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP33" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/

"ASP49" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP49"]
/*"ASP49" -> {"FORTFN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"}*/
/*"ASP49" -> {"INT"; "REF"}*/
"ASP49" -> "ALIST"
/*"ASP49" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP49" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"ASP49" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP49" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP49" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP49" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP49" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP49" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP49" -> {"CHARZ"; "ES"; "IEVALAB"; "EVALAB"; "VECTCAT"; "A1AGG"}*/
/*"ASP49" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"}*/

```

```

/*"ASP49" -> {"ELTAB"; "CLAGG"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ASP49" -> {"ELAGG"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP49" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP49" -> {"FRETRACT"; "FLINEXP"; "PFECAT"}*/

"ASP55" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP55"]
/*"ASP55" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"}*/
/*"ASP55" -> {"INT"; "REF"}*/
"ASP55" -> "ALIST"
/*"ASP55" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP55" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"ASP55" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP55" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP55" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP55" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP55" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP55" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP55" -> {"CHARZ"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"}*/
/*"ASP55" -> {"STEP"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "NNI"}*/
/*"ASP55" -> {"VECTCAT-"; "IXAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ASP55" -> {"HOAGG"; "AGG"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"ASP55" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "LSAGG-"}*/
/*"ASP55" -> {"ES"; "VECTCAT"; "A1AGG"; "FMTC"; "POLYCAT"; "PDRING"}*/
/*"ASP55" -> {"FAMR"; "AMR"; "CHARNZ"; "FRETRACT"; "FLINEXP"; "PFECAT"}*/

"ASP7" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP7"]
/*"ASP7" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"ASP7" -> "ALIST"
/*"ASP7" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP7" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"ASP7" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP7" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP7" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP7" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP7" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP7" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP7" -> {"CHARZ"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP7" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP7" -> {"FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/

"ASP78" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP78"]
/*"ASP78" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"ASP78" -> "ALIST"
/*"ASP78" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP78" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"ASP78" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP78" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP78" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP78" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP78" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP78" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP78" -> {"CHARZ"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP78" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP78" -> {"FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/

```

```

"ASP8" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP8"]
/*"ASP8" -> {"FVC"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"; "RNS"}*/
/*"ASP8" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP8" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP8" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP8" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"ASP8" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP8" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"ASP8" -> {"SYMBOL"; "INT"; "REF"}*/
"ASP8" -> "ALIST"
/*"ASP8" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP8" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"}*/
/*"ASP8" -> {"OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"; "VECTCAT"}*/
/*"ASP8" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "EVALAB"}*/
/*"ASP8" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "VECTOR"; "IVECTOR"}*/
/*"ASP8" -> {"IARRAY1"; "FMTC"; "NNI"; "OM"; "ILIST"}*/

"ASP9" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP9"]
/*"ASP9" -> {"FORTFN"; "FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"ASP9" -> "ALIST"
/*"ASP9" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ASP9" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"ASP9" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP9" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP9" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP9" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP9" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP9" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP9" -> {"CHARZ"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP9" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP9" -> {"FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/

"ATTRBUT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ATTRBUT"]
/*"ATTRBUT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"; "FIELD"}*/
/*"ATTRBUT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ATTRBUT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"ATTRBUT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ATTRBUT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"ATTRBUT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"ATTRBUT" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INT"}*/
/*"ATTRBUT" -> {"LIST"; "ILIST"; "SYMBOL"; "REF"}*/
"ATTRBUT" -> "ALIST"
/*"ATTRBUT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ATTRBUT" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"BOOLEAN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BOOLEAN",
           shape=ellipse]
/*"BOOLEAN" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "FINITE"; "LOGIC"}*/
/*"BOOLEAN" -> {"KONVERT"; "BOOLEAN"; "INT"; "INS-"; "PI"; "NNI"; "SYMBOL"}*/
/*"BOOLEAN" -> "REF"*/
"BOOLEAN" -> "ALIST"
/*"BOOLEAN" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"BOOLEAN" -> {"A1AGG"; "ISTRING"; "SRAGG"; "FLAGG"; "LNAGG"}*/

```

```

"BLUPPACK" [color="#88FF44",href="bookvol10.4.pdf#nameddest=BLUPPACK"]
"BLUPPACK" -> "RFP"
"BLUPPACK" -> "NPOLYGON"
/*"BLUPPACK" -> {"BLMETCT"; "PFORP"; "AFFPL"; "PACPERC"; "FIELD"; "EUCDOM"}*/
/*"BLUPPACK" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"BLUPPACK" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"BLUPPACK" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"BLUPPACK" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"BLUPPACK" -> {"UFD"; "DIVRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"BLUPPACK" -> {"FRETRCT"; "RETRACT"; "DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"BLUPPACK" -> {"TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "DIFEXT"}*/
/*"BLUPPACK" -> {"DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "FINITE"}*/
/*"BLUPPACK" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"BLUPPACK" -> {"OAMONS"; "VSPACE"; "INT"; "LIST"; "ILIST"; "POLYCAT"}*/
/*"BLUPPACK" -> {"KONVERT"; "PATMAB"; "PFECAT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"BLUPPACK" -> {"RCAGG"; "LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "NNI"}*/
/*"BLUPPACK" -> {"LSAGG-"; "STAGG-"; "SINT"; "PI"; "ELAGG-"; "FLAGG-"}*/
/*"BLUPPACK" -> {"URAGG-"; "BOOLEAN"; "VECTOR"; "SYMBOL"; "REF"; "ALIST"}*/
/*"BLUPPACK" -> {"STRING"; "CHAR"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"BLUPPACK" -> {"STAGG-"; "LNAGG-"}*/

"BOP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=BOP"]
/*"BOP" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"BOP" -> "ALIST"
/*"BOP" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"BOP" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "STRICAT"; "SRAGG"}*/
/*"BOP" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"BOP" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"BOP" -> {"OM"; "BOOLEAN"; "NNI"; "FSAGG"; "DIAGG"; "DIOPS"; "BGAGG"}*/
/*"BOP" -> {"SETAGG"; "FINITE"; "ORDFIN"}*/

"BOP1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=BOP1"]
/*"BOP1" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDSET"; "SYMBOL"; "INT"; "REF"}*/
"BOP1" -> "ALIST"
/*"BOP1" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"BOP1" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/
/*"BOP1" -> {"BOOLEAN"; "KONVERT"}*/

"COMMONOP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMMONOP"]
/*"COMMONOP" -> {"BOOLEAN"; "SYMBOL"; "INT"; "REF"}*/
"COMMONOP" -> "ALIST"
/*"COMMONOP" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"COMMONOP" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/
/*"COMMONOP" -> {"ILIST"; "LSAGG-"; "STAGG-"; "PI"}*/

"COMPCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=COMPCAT"]
/*"COMPCAT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"COMPCAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"COMPCAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "MONOGEN"}*/
/*"COMPCAT" -> {"FRAMALG"; "FINRALG"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"COMPCAT" -> {"KONVERT"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"COMPCAT" -> {"FINITE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"COMPCAT" -> {"ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"; "DIFRING"; "PDRING"}*/

```

```

/*"COMPCAT" -> {"FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"COMPCAT" -> {"IEVALAB"; "FPATMAB"; "TYPE"; "PATMAB"; "PATAB"}*/
/*"COMPCAT" -> {"ORDSET"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"COMPCAT" -> {"ELEMFUN"; "RADCAT"; "PFECAT"; "NNI"; "INT"; "PI"; "INS"}*/
/*"COMPCAT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"COMPCAT" -> {"CFCAT"; "REAL"; "BOOLEAN"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"COMPCAT" -> {"AMR"; "LIST"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"COMPCAT" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"COMPCAT" -> {"AGG"; "ELTAGG"; "CLAGG"; "SYMBOL"; "REF"}*/
"COMPCAT" -> "ALIST"
/*"COMPCAT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"COMPCAT" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "RNS"; "FPS"}*/

"COMPCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=COMPCAT"]
/*"COMPCAT-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"COMPCAT-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"COMPCAT-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"COMPCAT-" -> {"MONOGEN"; "FRAMALG"; "FINRAGL"; "ALGEBRA"; "MODULE"}*/
/*"COMPCAT-" -> {"CHARZ"; "CHARNZ"; "KONVERT"; "FRETRCT"; "RETRACT"}*/
/*"COMPCAT-" -> {"FLINEXP"; "LINEXP"; "FINITE"; "FIELD"; "EUCDOM"}*/
/*"COMPCAT-" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"COMPCAT-" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FFIELDC"; "FPC"}*/
/*"COMPCAT-" -> {"STEP"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/
/*"COMPCAT-" -> {"FPATMAB"; "TYPE"; "PATMAB"; "PATAB"; "ORDSET"}*/
/*"COMPCAT-" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"COMPCAT-" -> {"ELEMFUN"; "RADCAT"; "PFECAT"; "NNI"; "INT"; "PI"}*/
/*"COMPCAT-" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"COMPCAT-" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "BOOLEAN"}*/
/*"COMPCAT-" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "LIST"; "OM"}*/
/*"COMPCAT-" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"; "A1AGG"}*/
/*"COMPCAT-" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"}*/
/*"COMPCAT-" -> {"CLAGG"; "SYMBOL"; "REF"}*/
"COMPCAT-" -> "ALIST"
/*"COMPCAT-" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"COMPCAT-" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"COMPCAT-" -> {"RNS"; "FPS"}*/

"DRAW" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DRAW"]
/*"DRAW" -> {"KONVERT"; "SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"}*/
/*"DRAW" -> "REF"*/
"DRAW" -> "ALIST"
/*"DRAW" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"DRAW" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"DRAW" -> {"NNI"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DRAW" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DRAW" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"DRAW" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"DRAW" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"DRAW" -> {"REAL"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/

"DRAWCFUN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DRAWCFUN"]
/*"DRAWCFUN" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DRAWCFUN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DRAWCFUN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/

```

```

/*"DRAWCFUN" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DRAWCFUN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"DRAWCFUN" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"DRAWCFUN" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"DRAWCFUN" -> {"SYMBOL"; "INT"; "REF"}*/
"DRAWCFUN" -> "ALIST"
/*"DRAWCFUN" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"DRAWCFUN" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"DRAWCFUN" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "DFLOAT"}*/
/*"DRAWCFUN" -> {"DIFRING"; "OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"DRAWCFUN" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "NNI"; "PI"; "PTCAT"}*/
/*"DRAWCFUN" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"DRAWCFUN" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"}*/
/*"DRAWCFUN" -> {"CLAGG"; "BOOLEAN"}*/

"DROPT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DROPT"]
/*"DROPT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"DROPT" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"DROPT" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"DROPT" -> {"FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
/*"DROPT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"DROPT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"DROPT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"DROPT" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"DROPT" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"DROPT" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "SYMBOL"; "REF"}*/
"DROPT" -> "ALIST"
/*"DROPT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"DROPT" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"; "FPS"}*/
/*"DROPT" -> {"RNS"; "FIELD"; "DIVRING"; "RADCAT"; "BOOLEAN"}*/

"DROPT0" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DROPT0"]
/*"DROPT0" -> {"SYMBOL"; "INT"; "REF"}*/
"DROPT0" -> "ALIST"
/*"DROPT0" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"DROPT0" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"DROPT0" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"DROPT0" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"DROPT0" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"DROPT0" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"DROPT0" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DROPT0" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"DROPT0" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/

"D01ANFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01ANFA"]
/*"D01ANFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
/*"D01ANFA" -> {"SYMBOL"; "REF"}*/
"D01ANFA" -> "ALIST"
/*"D01ANFA" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"D01ANFA" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"D01ANFA" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"D01ANFA" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"D01ANFA" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"D01ANFA" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/

```



```

/*"D01ANFA" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"D01ANFA" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"D01ANFA" -> {"CHARZ"; "DIFRING"; "OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"D01ANFA" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "PI"; "INS-"}*/
/*"D01ANFA" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"D01ANFA" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"D01ANFA" -> "ABELMON-"/>

"D01ASFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01ASFA"]
/*"D01ASFA" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"}*/
/*"D01ASFA" -> {"SYMBOL"; "REF"}*/
"D01ASFA" -> "ALIST"
/*"D01ASFA" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"D01ASFA" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"D01ASFA" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"D01ASFA" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"D01ASFA" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"D01ASFA" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"D01ASFA" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"D01ASFA" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"D01ASFA" -> {"DIFRING"; "OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"D01ASFA" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "PI"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"D01ASFA" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"D01ASFA" -> {"MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"; "DFLOAT"}*/
/*"D01ASFA" -> {"FPS-"; "RNS-"; "FIELD-"; "DIVRING-"}*/

"D03AGNT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=D03AGNT"]
/*"D03AGNT" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"D03AGNT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"D03AGNT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"D03AGNT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"D03AGNT" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D03AGNT" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"D03AGNT" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"; "OM"; "TRANFUN"}*/
/*"D03AGNT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"D03AGNT" -> {"NNI"; "INT"; "INS"; "OINTDOM"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"D03AGNT" -> {"SYMBOL"; "REF"}*/
"D03AGNT" -> "ALIST"
/*"D03AGNT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"D03AGNT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"}*/
/*"D03AGNT" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"D03AGNT" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"D03AGNT" -> {"FLAGG"; "ELAGG"; "ILIST"; "LSAGG-"; "STAGG-"; "DFLOAT"}*/
/*"D03AGNT" -> {"PI"; "BOOLEAN"; "ELAGG-"; "URAGG-"; "FPS-"; "RNS-"}*/
/*"D03AGNT" -> {"FIELD-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "DIVRING-"}*/
/*"D03AGNT" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/

"EP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EP"]
/*"EP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"EP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"EP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"EP" -> {"MODULE"; "ENTIRER"; "ORDSET"; "KONVERT"; "OM"; "PATMAB"}*/
/*"EP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"EP" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "PFECAT"}*/

```

```

/*"EP" -> {"UFD"; "QFCAT"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "FEVALAB"}*/
/*"EP" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "TYPE"; "STEP"}*/
/*"EP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"EP" -> {"REAL"; "NNI"; "INT"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"EP" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"EP" -> {"FLAGG"; "ELAGG"; "LIST"; "ILIST"; "SINT"; "PI"; "SYMBOL"; "REF"}*/
"EP" -> "ALIST"
/*"EP" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"EP" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "UPOLYC"; "VECTOR"; "IVECTOR"}*/
/*"EP" -> "IARRAY1"*/

/* Note that ES has a circular self reference */
"ES" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ES",
      shape=ellipse]
/*"ES" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"ES" -> {"IEVALAB"; "EVALAB"; "CACHSET"; "SYMBOL"; "INT"; "REF"}*/
"ES" -> "ALIST"
/*"ES" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ES" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"; "FSAGG"}*/
/*"ES" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "CLAGG"}*/
/*"ES" -> {"KONVERT"; "SETAGG"; "FINITE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"ES" -> {"RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"}*/
/*"ES" -> {"OM"; "PATAB"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "NNI"}*/
/*"ES" -> {"PATMAB"; "URAGG-"}*/

"ES-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ES-",
       shape=ellipse]
/*"ES-" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"ES-" -> {"IEVALAB"; "EVALAB"; "CACHSET"; "SYMBOL"; "INT"; "REF"}*/
"ES-" -> "ALIST"
/*"ES-" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ES-" -> {"A1AGG"; "ISTRING"; "SRAGG"; "FLAGG"; "LNAGG"; "BOOLEAN"}*/
/*"ES-" -> {"FSAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"ES-" -> {"CLAGG"; "KONVERT"; "SETAGG"; "FINITE"; "LSAGG"; "STAGG"}*/
/*"ES-" -> {"URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"ES-" -> {"FLAGG"; "ELAGG"; "OM"; "PATAB"; "ILIST"; "LSAGG"}*/
/*"ES-" -> {"STAGG"; "ELAGG"; "NNI"; "PATMAB"; "URAGG"}*/

"E04AGNT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=E04AGNT"]
/*"E04AGNT" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"E04AGNT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"E04AGNT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"E04AGNT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"E04AGNT" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"E04AGNT" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"E04AGNT" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"; "OM"; "TRANFUN"}*/
/*"E04AGNT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"E04AGNT" -> {"DFLOAT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"E04AGNT" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"E04AGNT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "INT"; "LIST"}*/
/*"E04AGNT" -> {"ILIST"; "SINT"; "NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"E04AGNT" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "INS"}*/
/*"E04AGNT" -> {"OINTDOM"; "LINEXP"; "CFCAT"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"E04AGNT" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/

```

```

/*"EO4AGNT" -> {"CHARNZ"; "PFECAT"; "BOOLEAN"; "SYMBOL"; "REF"}*/
"EO4AGNT" -> "ALIST"
/*"EO4AGNT" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"EO4AGNT" -> {"ISTRING"; "SRAGG-"; "PI"; "VECTOR"}*/

"FCPAK1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FCPAK1"]
/*"FCPAK1" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FCPAK1" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FCPAK1" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FCPAK1" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FCPAK1" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FCPAK1" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"FCPAK1" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/
/*"FCPAK1" -> {"SYMBOL"; "INT"; "REF"}*/
"FCPAK1" -> "ALIST"
/*"FCPAK1" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FCPAK1" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"FEXPR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FEXPR"]
/*"FEXPR" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"FEXPR" -> {"IEVALAB"; "EVALAB"; "ALGEBRA"; "RING"; "RNG"; "ABELGRP"}*/
/*"FEXPR" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FEXPR" -> {"MODULE"; "BMODULE"; "RMODULE"; "PDRING"; "FMTC"; "INTDOM"}*/
/*"FEXPR" -> {"COMRING"; "ENTIRER"; "BOOLEAN"; "SYMBOL"; "INT"; "REF"}*/
"FEXPR" -> "ALIST"
/*"FEXPR" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FEXPR" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"}*/
/*"FEXPR" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"FEXPR" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"FEXPR" -> {"ELAGG"; "OM"; "ILIST"; "NNI"; "PATMAB"; "INS"; "UFD"}*/
/*"FEXPR" -> {"GCDDOM"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"FEXPR" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "LINEXP"; "CFCAT"}*/
/*"FEXPR" -> {"REAL"; "CHARZ"; "STEP"; "POLYCAT"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"FEXPR" -> {"FRETRCT"; "FLINEXP"; "PFECAT"; "FPS"; "RNS"; "FIELD"}*/
/*"FEXPR" -> {"DIVRING"; "RADCAT"}*/

"FFCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FFCAT"]
/*"FFCAT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"FFCAT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FFCAT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"FFCAT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"FFCAT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"FFCAT" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"FFCAT" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"FFCAT" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"FFCAT" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"FFCAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"FFCAT" -> {"MONOGEN"; "FRAMALG"; "FINRNLG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"FFCAT" -> {"INT"; "BOOLEAN"; "NNI"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"FFCAT" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"; "SINT"; "VECTOR"}*/
/*"FFCAT" -> {"IVECTOR"; "IARRAY1"; "SYMBOL"; "REF"}*/
"FFCAT" -> "ALIST"
/*"FFCAT" -> {"LIST"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"FFCAT" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"; "LSAGG-"}*/

```

```

/*"FFCAT" -> {"STAGG-"; "INS"; "CFCAT"; "OM"; "VECTCAT-"; "PI"}*/

"FFCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFCAT"]
/*"FFCAT-" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"}*/
/*"FFCAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FFCAT-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FFCAT-" -> {"FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"FFCAT-" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"FFCAT-" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FFCAT-" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"FFCAT-" -> {"GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"}*/
/*"FFCAT-" -> {"STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"; "QFCAT"}*/
/*"FFCAT-" -> {"FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"FFCAT-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FFCAT-" -> {"REAL"; "MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"}*/
/*"FFCAT-" -> {"FFIELDC"; "FPC"; "INT"; "BOOLEAN"; "NNI"; "VECTCAT"}*/
/*"FFCAT-" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"FFCAT-" -> {"ELTAGG"; "CLAGG"; "SINT"; "VECTOR"; "IVECTOR"}*/
/*"FFCAT-" -> {"IARRAY1"; "SYMBOL"; "REF"}*/
"FFCAT-" -> "ALIST"
/*"FFCAT-" -> {"LIST"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"FFCAT-" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"FFCAT-" -> {"LSAGG-"; "STAGG-"; "INS"; "CFCAT"; "OM"; "VECTCAT-"}*/
/*"FFCAT-" -> "PI"*/

"FFCGP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFCGP"]
/*"FFCGP" -> {"FAXF"; "XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFCGP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFCGP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFCGP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFCGP" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"}*/
/*"FFCGP" -> {"FPC"; "CHARNZ"; "FINITE"; "FFIELDC"; "STEP"; "DIFRING"}*/
/*"FFCGP" -> {"NNI"; "INT"; "MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"}*/
/*"FFCGP" -> {"PI"; "SINT"; "PRIMARR"; "SYMBOL"; "REF"}*/
"FFCGP" -> "ALIST"
/*"FFCGP" -> {"LIST"; "STRING"; "CHAR"; "OUTFORM"; "A1AGG-"; "ISTRING"}*/
/*"FFCGP" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"; "OAMONS"; "OCAMON"}*/
/*"FFCGP" -> {"OAMON"; "OASGP"; "ORDSET"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"FFCGP" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"FFCGP" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"FFCGP" -> {"ILIST"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "KONVERT"}*/
/*"FFCGP" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

"FFNBP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFNBP"]
/*"FFNBP" -> {"FAXF"; "XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFNBP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFNBP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFNBP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FFNBP" -> {"ENTIRER"; "UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"}*/
/*"FFNBP" -> {"FPC"; "CHARNZ"; "FINITE"; "FFIELDC"; "STEP"; "DIFRING"}*/
/*"FFNBP" -> {"SYMBOL"; "INT"; "REF"}*/
"FFNBP" -> "ALIST"
/*"FFNBP" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FFNBP" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/

```

```

/*"FFNBP" -> {"PI"; "NNI"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"}*/
/*"FFNBP" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FFNBP" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"FFNBP" -> {"ORDSET"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "TBAGG"}*/
/*"FFNBP" -> {"KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "VECTCAT-"; "UPOLYC"}*/
/*"FFNBP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "FRETRCT"; "FLINEXP"}*/
/*"FFNBP" -> {"LINEXP"; "PATMAB"; "PFECAT"; "DIFEXT"; "LSAGG"; "STAGG"}*/
/*"FFNBP" -> {"URAGG"; "RCAGG"; "ELAGG"; "OM"; "ILIST"; "LSAGG-"; "MONOID-"}*/
/*"FFNBP" -> {"ABELMON-"; "ORDSET-"; "SGROUP-"; "INS-"; "INS"; "OINTDOM"}*/
/*"FFNBP" -> {"ORDRING"; "OAGROUP"; "CFCAT"; "REAL"; "IXAGG-"; "CLAGG-"}*/
/*"FFNBP" -> {"HOAGG-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/

"FFP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FFP"]
/*"FFP" -> {"FAXF"; "XF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FFP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FFP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FFP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FFP" -> {"UFD"; "DIVRING"; "RETRACT"; "VSPACE"; "CHARZ"; "FPC"; "CHARNZ"}*/
/*"FFP" -> {"FINITE"; "FFIELDC"; "STEP"; "DIFRING"; "SYMBOL"; "INT"; "REF"}*/
"FFP" -> "ALIST"
/*"FFP" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FFP" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/
/*"FFP" -> {"MONOID-"; "ABELMON-"; "ORDSET-"; "SGROUP-"; "PI"; "BOOLEAN"}*/
/*"FFP" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "TBAGG"; "KDAGG"}*/
/*"FFP" -> {"DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"FFP" -> {"IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"FFP" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"; "IXAGG-"; "CLAGG-"}*/
/*"FFP" -> {"HOAGG-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "ILIST"}*/
/*"FFP" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "INS-"; "INS"; "OINTDOM"}*/
/*"FFP" -> {"ORDRING"; "OAGROUP"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

"FLOAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FLOAT"]
/*"FLOAT" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FLOAT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FLOAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FLOAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FLOAT" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FLOAT" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"FLOAT" -> {"RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"; "OM"; "TRANFUN"}*/
/*"FLOAT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "INT"; "INS-"}*/
/*"FLOAT" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"FLOAT" -> {"DIFRING-"; "ORDRING-"; "PI"; "NNI"; "MODULE-"; "RING-"}*/
/*"FLOAT" -> {"ABELGRP-"; "ABELMON-"; "SINT"; "BOOLEAN"; "MONOID-"}*/
/*"FLOAT" -> {"ABELSG-"; "SGROUP-"; "ORDSET-"; "INS"; "OINTDOM"; "LINEXP"}*/
/*"FLOAT" -> {"CFCAT"; "STEP"; "STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"}*/
/*"FLOAT" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"FLOAT" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"FLOAT" -> {"LIST"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"FLOAT" -> {"LNAGG-"; "SYMBOL"; "REF"}*/
"FLOAT" -> "ALIST"
/*"FLOAT" -> "DFLOAT"*/

"FPARFRAC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FPARFRAC"]
/*"FPARFRAC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"; "UPOLYC"}*/

```

```

/*"FPARFRAC" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FPARFRAC" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FPARFRAC" -> {"FAMR"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"FPARFRAC" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"FPARFRAC" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FPARFRAC" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "PATMAB"; "GCDDOM"}*/
/*"FPARFRAC" -> {"PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"FPARFRAC" -> {"EUCDOM"; "PID"; "FIELD"; "DIVRING"; "SYMBOL"; "INT"; "REF"}*/
"FPARFRAC" -> "ALIST"
/*"FPARFRAC" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FPARFRAC" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/
/*"FPARFRAC" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"FPARFRAC" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"FPARFRAC" -> {"PI"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"; "DPOLCAT"}*/
/*"FPARFRAC" -> {"INS"; "CFCAT"}*/

"FR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FR"]
/*"FR" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FR" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FR" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FR" -> {"ENTIRER"; "DIFEXT"; "DIFRING"; "PDRING"; "FEVALAB"; "ELTAB"}*/
/*"FR" -> {"EVALAB"; "IEVALAB"; "FRETRCT"; "RETRACT"; "GCDDOM"; "REAL"}*/
/*"FR" -> {"KONVERT"; "UFD"; "INT"; "LIST"; "ILIST"; "SYMBOL"; "REF"}*/
"FR" -> "ALIST"
/*"FR" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"FR" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ORDSET"; "BOOLEAN"}*/
/*"FR" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FR" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"FR" -> {"NNI"; "INS"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"FR" -> {"OCAMON"; "OAMON"; "OASGP"; "LINEXP"; "PATMAB"; "CFCAT"; "CHARZ"}*/
/*"FR" -> {"STEP"; "DFLOAT"; "LSAGG-"; "STAGG-"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"FR" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"FR" -> {"MODULE-"; "RING-"; "ABELGRP-"; "PI"; "ELAGG-"; "URAGG-"}*/

"FRNAALG" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FRNAALG"]
/*"FRNAALG" -> {"FINAALG"; "NAALG"; "NARNG"; "ABELGRP"; "CABMON"}*/
/*"FRNAALG" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FRNAALG" -> {"MONAD"; "MODULE"; "BMODULE"; "LMODULE"; "RMODULE"}*/
/*"FRNAALG" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"; "FIELD"}*/
/*"FRNAALG" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"; "ENTIRER"}*/
/*"FRNAALG" -> {"UFD"; "DIVRING"; "SINT"; "PI"; "NNI"; "INT"; "STRING"}*/
/*"FRNAALG" -> {"CHAR"; "OUTFORM"; "LIST"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"FRNAALG" -> {"SYMBOL"; "REF"}*/
"FRNAALG" -> "ALIST"
/*"FRNAALG" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"FRNAALG" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"FRNAALG" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"FRNAALG" -> {"PATMAB"; "PFECAT"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"FRNAALG" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"FRNAALG" -> {"AGG"; "TYPE"; "ELTAGG"; "ELTAB"; "CLAGG"; "VECTCAT-"}*/
/*"FRNAALG" -> {"ILIST"; "MONOID-"; "ABELSG-"; "SGROUP-"; "INS"; "OINTDOM"}*/
/*"FRNAALG" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"FRNAALG" -> {"CFCAT"; "REAL"; "STEP"; "OM"}*/

```

```

"FRNAALG-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FRNAALG"]
/*"FRNAALG-" -> {"FINAALG"; "NAALG"; "NARNG"; "ABELGRP"; "CABMON"}*/
/*"FRNAALG-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FRNAALG-" -> {"MONAD"; "MODULE"; "BMODULE"; "LMODULE"; "RMODULE"}*/
/*"FRNAALG-" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"; "FIELD"}*/
/*"FRNAALG-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"}*/
/*"FRNAALG-" -> {"ENTIRER"; "UFD"; "DIVRING"; "SINT"; "PI"; "NNI"}*/
/*"FRNAALG-" -> {"INT"; "STRING"; "CHAR"; "OUTFORM"; "LIST"; "PRIMARR"}*/
/*"FRNAALG-" -> {"A1AGG-"; "ISTRING"; "SYMBOL"; "REF"}*/
"FRNAALG-" -> "ALIST"
/*"FRNAALG-" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "POLYCAT"; "PDRING"}*/
/*"FRNAALG-" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"}*/
/*"FRNAALG-" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"FRNAALG-" -> {"PFECAT"; "PATMAB"; "VECTCAT"; "VECTOR"; "IVECTOR"}*/
/*"FRNAALG-" -> {"IARRAY1"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"FRNAALG-" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"; "ELTAB"}*/
/*"FRNAALG-" -> {"CLAGG"; "VECTCAT-"; "ILIST"; "MONOID-"; "ABELSG-"}*/
/*"FRNAALG-" -> {"SGROUP-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"FRNAALG-" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "CFCAT"}*/
/*"FRNAALG-" -> {"REAL"; "STEP"; "OM"}*/

"FS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FS"]
/*"FS" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"FS" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"FS" -> {"PATMAB"; "FRETRACT"; "MONOID"; "SGROUP"; "GROUP"; "ABELMON"}*/
/*"FS" -> {"ABELSG"; "ABELGRP"; "CABMON"; "RING"; "RNG"; "LMODULE"}*/
/*"FS" -> {"PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "ALGEBRA"}*/
/*"FS" -> {"MODULE"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"FS" -> {"SYMBOL"; "INT"; "REF"}*/
"FS" -> "ALIST"
/*"FS" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"FS" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"; "BOOLEAN"}*/
/*"FS" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "LSAGG"; "STAGG"}*/
/*"FS" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"FS" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "CACHSET"; "NNI"}*/
/*"FS" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"FS" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"FS" -> {"PFECAT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FS" -> {"OAMON"; "OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"; "PI"; "FPS"}*/
/*"FS" -> {"RNS"; "RADCAT"; "UPOLYC"; "DIFEXT"; "QFCAT"; "FEVALAB"}*/

"FS-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FS"]
/*"FS-" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"FS-" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"FS-" -> {"PATMAB"; "FRETRACT"; "MONOID"; "SGROUP"; "GROUP"; "ABELMON"}*/
/*"FS-" -> {"ABELSG"; "ABELGRP"; "CABMON"; "RING"; "RNG"; "LMODULE"}*/
/*"FS-" -> {"PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "ALGEBRA"}*/
/*"FS-" -> {"MODULE"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FS-" -> {"GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"FS-" -> {"SYMBOL"; "INT"; "REF"}*/
"FS-" -> "ALIST"
/*"FS-" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FS-" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/

```

```

/*"FS-" -> {"BOOLEAN"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "LSAGG"}*/
/*"FS-" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"FS-" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"FS-" -> {"OM"; "CACHSET"; "NNI"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"FS-" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"FS-" -> {"BASTYPE-"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "INS"}*/
/*"FS-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FS-" -> {"OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"; "PI"; "FPS"}*/
/*"FS-" -> {"RNS"; "RADCAT"; "UPOLYC"; "DIFEXT"; "QFCAT"; "FEVALAB"}*/

"FST" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FST"]
/*"FST" -> {"KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"FST" -> "ALIST"
/*"FST" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"FST" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/

"FUNCTION" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FUNCTION"]
/*"FUNCTION" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"FUNCTION" -> "ALIST"
/*"FUNCTION" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"FUNCTION" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"FUNCTION" -> "BOOLEAN"*/

"GDMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GDMP"]
/*"GDMP" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"GDMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"GDMP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"GDMP" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"GDMP" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"GDMP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"}*/
/*"GDMP" -> {"UFD"; "DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"GDMP" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"GDMP" -> {"OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "FIELD"}*/
/*"GDMP" -> {"EUCDOM"; "PID"; "DIVRING"; "ORDFIN"; "LSAGG"; "STAGG"}*/
/*"GDMP" -> {"URAGG"; "RCAGG"; "LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"GDMP" -> {"INT"; "LIST"; "ILIST"; "NNI"; "VECTCAT"; "A1AGG"; "VECTOR"}*/
/*"GDMP" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"; "SINT"; "PI"}*/
/*"GDMP" -> {"BOOLEAN"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"GDMP" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "LSAGG-"}*/
/*"GDMP" -> {"STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"; "FPS"; "RNS"; "REAL"}*/
/*"GDMP" -> {"RADCAT"; "SYMBOL"; "REF"}*/
"GDMP" -> "ALIST"
/*"GDMP" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "ISTRING"; "SRAGG-"}*/
/*"GDMP" -> {"INS"; "OINTDOM"; "CFCAT"; "STEP"; "UPOLYC"}*/

"GOPT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GOPT"]
/*"GOPT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"GOPT" -> "ALIST"
/*"GOPT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"GOPT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"GOPT" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"}*/
/*"GOPT" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"GOPT" -> {"SETCAT-"; "BASTYPE-"}*/

```



```

"GOPTO" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GOPTO"]
"GOPTO" -> "STRING"
/*"GOPTO" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "PI"; "NNI"; "INT"; "BOOLEAN"}*/
/*"GOPTO" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "PRIMARR"}*/
/*"GOPTO" -> {"A1AGG-"; "ISTRING"; "MONOID-"; "ABELSG-"; "SGROUP-"; }*/
/*"GOPTO" -> {"ORDSET-"; "SETCAT-"; "BASTYPE-"}*/

"HACKPI" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HACKPI"]
/*"HACKPI" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"HACKPI" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"HACKPI" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"HACKPI" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"HACKPI" -> {"DIVRING"; "CHARZ"; "RETRACT"; "REAL"; "KONVERT"; "INS"}*/
/*"HACKPI" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"HACKPI" -> {"DIFRING"; "LINEXP"; "PATMAB"; "CFCAT"; "STEP"}*/
/*"HACKPI" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"HACKPI" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/
/*"HACKPI" -> {"ELTAB"; "DIFEXT"; "SYMBOL"; "INT"; "REF"}*/
"HACKPI" -> "ALIST"
/*"HACKPI" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"HACKPI" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/
/*"HACKPI" -> {"DFLOAT"; "OM"; "BOOLEAN"; "FPS"; "RNS"; "RADCAT"}*/

"IDEAL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IDEAL"]
/*"IDEAL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"IDEAL" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"IDEAL" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IDEAL" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"IDEAL" -> {"DIVRING"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"IDEAL" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"IDEAL" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"IDEAL" -> {"LINEXP"; "KONVERT"; "PATMAB"; "PFECAT"; "NNI"; "INT"; "LIST"}*/
/*"IDEAL" -> {"ILIST"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"IDEAL" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"IDEAL" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"IDEAL" -> {"FLAGG-"; "SINT"; "SYMBOL"; "REF"}*/
"IDEAL" -> "ALIST"
/*"IDEAL" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"IDEAL" -> {"SRAGG-"; "LNAGG-"; "DIRPCAT"; "DIFEXT"; "DIFRING"; "FINITE"}*/
/*"IDEAL" -> {"ORDRING"; "OAGROUP"; "VSPACE"; "ORDFIN"; "VECTOR"; "IVECTOR"}*/
/*"IDEAL" -> {"IARRAY1"; "VECTCAT-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"}*/
/*"IDEAL" -> {"AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "VECTCAT"; "A1AGG"}*/

"INFCLCT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=INFCLCT"]
/*"INFCLCT" -> {"PRSPCT"; "LOCPOWC"; "PLACESC"; "DIVCAT"; "BLMETCT"; "AFFPL"}*/
/*"INFCLCT" -> {"SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"; "NNI"; "INT"; "OUTFORM"}*/
/*"INFCLCT" -> {"LIST"; "SYMBOL"; "REF"}*/
"INFCLCT" -> "ALIST"
/*"INFCLCT" -> {"STRING"; "CHAR"; "SINT"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"INFCLCT" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"INFCLCT" -> {"ELAGG-"; "URAGG-"}*/

"INFORM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INFORM"]
/*"INFORM" -> {"SEXCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"; "ORDSET"}*/

```

```

/*"INFORM" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"INFORM" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"INFORM" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INFORM" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"INFORM" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"INFORM" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "FPS"; "RNS"}*/
/*"INFORM" -> {"FIELD"; "DIVRING"; "RADCAT"; "INT"; "SYMBOL"; "REF"}*/
"INFORM" -> "ALIST"
/*"INFORM" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"INFORM" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "DFLOAT"}*/
/*"INFORM" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"INFORM" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"INFORM" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"INFORM" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"INFORM" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "NNI"}*/
/*"INFORM" -> {"STRICAT"; "SRAGG"; "A1AGG"}*/

"INFORM1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INFORM1"]
/*"INFORM1" -> {"TYPE"; "SYMBOL"; "INT"; "REF"}*/
"INFORM1" -> "ALIST"
/*"INFORM1" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"INFORM1" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"IPRNTPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IPRNTPK"]
/*"IPRNTPK" -> {"SYMBOL"; "INT"; "REF"}*/
"IPRNTPK" -> "ALIST"
/*"IPRNTPK" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"IPRNTPK" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"IR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IR"]
/*"IR" -> {"MODULE"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"IR" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "RMODULE"; "RETRACT"}*/
/*"IR" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"IR" -> {"SGROUP"; "MONOID"; "ALGEBRA"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"IR" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"IR" -> {"ORDSET"; "DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"IR" -> {"REAL"; "CHARZ"; "STEP"; "QFCAT"; "FIELD"; "DIVRING"}*/
/*"IR" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "PDRING"}*/
/*"IR" -> {"FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"; "PFECAT"}*/
/*"IR" -> {"SYMBOL"; "INT"; "REF"}*/
"IR" -> "ALIST"
/*"IR" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"IR" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"IR" -> {"NNI"; "BOOLEAN"; "LFCAT"; "PRIMCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"IR" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "LSAGG-"; "STAGG-"}*/
/*"IR" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "PI"; "LSAGG"; "STAGG"}*/
/*"IR" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"IR" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/

"ISUPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ISUPS"]
/*"ISUPS" -> {"UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ISUPS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ISUPS" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"ISUPS" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/

```

```

/*"ISUPS" -> {"ELTAB"; "DIFRING"; "PDRING"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"}*/
/*"ISUPS" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ISUPS" -> {"OASGP"; "ORDSET"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"ISUPS" -> {"CFCAT"; "REAL"; "STEP"; "BOOLEAN"; "INT"; "OM"; "SINT"}*/
/*"ISUPS" -> {"NNI"; "PI"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"ISUPS" -> {"FLAGG-"; "URAGG-"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"ISUPS" -> {"AHYP"; "ELEMFUN"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"}*/
/*"ISUPS" -> {"A1AGG-"; "ISTRING"; "SYMBOL"; "REF"}*/
"ISUPS" -> "ALIST"
/*"ISUPS" -> {"SRAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ISUPS" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"ISUPS" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "FIELD"; "DIVRING"}*/

"KERNEL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=KERNEL"]
/*"KERNEL" -> {"CACHSET"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "PATAB"}*/
/*"KERNEL" -> {"KONVERT"; "INT"; "NNI"; "LIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"KERNEL" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"KERNEL" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"KERNEL" -> {"ELAGG"; "OM"; "ILIST"; "SYMBOL"; "REF"}*/
"KERNEL" -> "ALIST"
/*"KERNEL" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"KERNEL" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"; "UFD"}*/
/*"KERNEL" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"KERNEL" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"KERNEL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"KERNEL" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"KERNEL" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"KERNEL" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "FPS"; "RNS"}*/
/*"KERNEL" -> {"FIELD"; "DIVRING"; "RADCAT"}*/

"LIB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LIB"]
/*"LIB" -> {"TBAGG"; "KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"}*/
/*"LIB" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"LIB" -> {"CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "SYMBOL"}*/
/*"LIB" -> {"INT"; "REF"}*/
"LIB" -> "ALIST"
/*"LIB" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"LIB" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "STRICAT"}*/
/*"LIB" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "ORDSET"; "OM"; "ORDFIN"}*/
/*"LIB" -> "FINITE"*/

"LIST" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LIST",
        shape=ellipse]
/*"LIST" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"LIST" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"LIST" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"LIST" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "BOOLEAN"; "ILIST"}*/
/*"LIST" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "SYMBOL"; "REF"}*/
"LIST" -> "ALIST"
/*"LIST" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"LIST" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"; "UFD"}*/
/*"LIST" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LIST" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LIST" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/

```

```

/*"LIST" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"LIST" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"LIST" -> {"REAL"; "CHARZ"; "STEP"}*/

"LMDDICT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LMDDICT"]
/*"LMDDICT" -> {"MDAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"LMDDICT" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"; "KONVERT"}*/
/*"LMDDICT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"LMDDICT" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INT"}*/
/*"LMDDICT" -> {"LIST"; "ILIST"; "SYMBOL"; "REF"}*/
"LMDDICT" -> "ALIST"
/*"LMDDICT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"LMDDICT" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"}*/
/*"LMDDICT" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "NNI"; "BOOLEAN"}*/

"LODO" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LODO"]
/*"LODO" -> {"LODOCAT"; "OREPCAT"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LODO" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"LODO" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"}*/
/*"LODO" -> {"ALGEBRA"; "MODULE"; "ELTAB"; "SYMBOL"; "INT"; "REF"}*/
"LODO" -> "ALIST"
/*"LODO" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"LODO" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FIELD"}*/
/*"LODO" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"LODO" -> {"UFD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"LODO" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"LODO" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"LODOOPS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LODOOPS"]
/*"LODOOPS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"LODOOPS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LODOOPS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LODOOPS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"LODOOPS" -> {"DIVRING"; "LODOCAT"; "OREPCAT"; "FRETRCT"; "RETRACT"}*/
/*"LODOOPS" -> {"ELTAB"; "SYMBOL"; "INT"; "REF"}*/
"LODOOPS" -> "ALIST"
/*"LODOOPS" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"LODOOPS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"LODOOPS" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"LODOOPS" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "CLAGG"}*/
/*"LODOOPS" -> {"KONVERT"; "ORDSET"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"LODOOPS" -> {"VECTCAT-"; "NNI"; "PI"; "INS-"; "DPOLCAT"; "POLYCAT"}*/
/*"LODOOPS" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FLINEXP"}*/
/*"LODOOPS" -> {"LINEXP"; "PATMAB"; "PFECAT"; "DIFEXT"; "DIFRING"}*/
/*"LODOOPS" -> {"ILIST"; "LSAGG-"; "BOOLEAN"}*/

"MATRIX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MATRIX"]
/*"MATRIX" -> {"MATCAT"; "ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"MATRIX" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "KONVERT"}*/
/*"MATRIX" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"MATRIX" -> {"ELTAB"; "CLAGG"; "ORDSET"; "RING"; "RNG"; "ABELGRP"}*/
/*"MATRIX" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"MATRIX" -> {"INT"; "PRIMARR"; "NNI"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"MATRIX" -> {"COMRING"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/

```

```

/*"MATRIX" -> {"ENTIRER"; "FIELD"; "UFD"; "DIVRING"; "INS-"; "VECTOR"}*/
/*"MATRIX" -> {"IVECTOR"; "IARRAY1"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"MATRIX" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"MATRIX" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "SYMBOL"}*/
/*"MATRIX" -> "REF"*/
"MATRIX" -> "ALIST"
/*"MATRIX" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "A1AGG-"}*/
/*"MATRIX" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"}*/
/*"MATRIX" -> {"URAGG"; "RCAGG"; "ELAGG"}*/

"MKFLCFN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MKFLCFN"]
/*"MKFLCFN" -> {"KONVERT"; "SYMBOL"; "INT"; "REF"}*/
"MKFLCFN" -> "ALIST"
/*"MKFLCFN" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"MKFLCFN" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"MKFLCFN" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"MKFLCFN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"MKFLCFN" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ORDSET"}*/
/*"MKFLCFN" -> {"ELAGG"; "OM"; "STRICAT"; "SRAGG"; "A1AGG"; "LSAGG-"}*/
/*"MKFLCFN" -> {"STAGG-"; "ELAGG-"; "URAGG-"; "DFLOAT"}*/

"MSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MSET"]
/*"MSET" -> {"MSETAGG"; "MDAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"MSET" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"MSET" -> {"KONVERT"; "SETAGG"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"MSET" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"MSET" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"MSET" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"MSET" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"MSET" -> {"DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"MSET" -> {"CHARZ"; "STEP"; "INT"; "SYMBOL"; "REF"}*/
"MSET" -> "ALIST"
/*"MSET" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"MSET" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"MSET" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"MSET" -> {"ELTAB"; "FLAGG"; "ELAGG"; "OM"; "NNI"; "BOOLEAN"}*/

"M3D" [color="#88FF44",href="bookvol10.3.pdf#nameddest=M3D"]
/*"M3D" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"M3D" -> {"EVALAB"; "IEVALAB"; "SYMBOL"; "INT"; "REF"}*/
"M3D" -> "ALIST"
/*"M3D" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"M3D" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/
/*"M3D" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "PI"; "A1AGG"; "FLAGG"}*/
/*"M3D" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"M3D" -> {"ORDSET"; "VECTCAT-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"}*/
/*"M3D" -> {"AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "VECTCAT"; "RING"}*/
/*"M3D" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"M3D" -> {"MONOID"; "LMODULE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"M3D" -> {"ELAGG"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"}*/

"NAGC02" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGC02"]
/*"NAGC02" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGC02" -> "ALIST"

```

```

/*"NAGC02" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGC02" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGC02" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGC02" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGC02" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGC02" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGC02" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGC02" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGC02" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/

"NAGC05" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGC05"]
/*"NAGC05" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGC05" -> "ALIST"
/*"NAGC05" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGC05" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGC05" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGC05" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGC05" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NAGC05" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"NAGC05" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"NAGC05" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"NAGC05" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/

"NAGC06" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGC06"]
/*"NAGC06" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGC06" -> "ALIST"
/*"NAGC06" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGC06" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGC06" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGC06" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGC06" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGC06" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGC06" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGC06" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGC06" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/

"NAGD01" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGD01"]
/*"NAGD01" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGD01" -> "ALIST"
/*"NAGD01" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGD01" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGD01" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGD01" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGD01" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NAGD01" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"NAGD01" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"NAGD01" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"NAGD01" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/

"NAGD02" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGD02"]
/*"NAGD02" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGD02" -> "ALIST"
/*"NAGD02" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGD02" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/

```

```

/*"NAGD02" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGD02" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGD02" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGD02" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGD02" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGD02" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGD02" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/

"NAGD03" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGD03"]
/*"NAGD03" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGD03" -> "ALIST"
/*"NAGD03" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGD03" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGD03" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGD03" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGD03" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGD03" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGD03" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGD03" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGD03" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/

"NAGE01" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGE01"]
/*"NAGE01" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGE01" -> "ALIST"
/*"NAGE01" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGE01" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGE01" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGE01" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGE01" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGE01" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGE01" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGE01" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGE01" -> {"RADCAT"; "PATMAB"; "CHARZ"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"NAGE01" -> {"LINEXP"; "CFCAT"; "STEP"}*/

"NAGE02" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGE02"]
/*"NAGE02" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGE02" -> "ALIST"
/*"NAGE02" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGE02" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGE02" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGE02" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGE02" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NAGE02" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"NAGE02" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"NAGE02" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"NAGE02" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INS"; "OINTDOM"}*/
/*"NAGE02" -> {"DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/

"NAGE04" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGE04"]
/*"NAGE04" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGE04" -> "ALIST"
/*"NAGE04" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGE04" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/

```

```

/*"NAGE04" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGE04" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGE04" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGE04" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGE04" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"NAGE04" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"NAGE04" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INS"; "OINTDOM"}*/
/*"NAGE04" -> {"DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/

```

"NAGF07" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGF07"]

```

/*"NAGF07" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGF07" -> "ALIST"
/*"NAGF07" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGF07" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGF07" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGF07" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGF07" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGF07" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGF07" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGF07" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGF07" -> {"RADCAT"; "PATMAB"; "CHARZ"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"NAGF07" -> {"LINEXP"; "CFCAT"; "STEP"}*/

```

"NAGS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGS"]

```

/*"NAGS" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGS" -> "ALIST"
/*"NAGS" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"NAGS" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"NAGS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"NAGS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"NAGS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"NAGS" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"NAGS" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"}*/
/*"NAGS" -> {"PATMAB"; "CHARZ"}*/

```

"NAGSP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGSP"]

```

/*"NAGSP" -> {"SYMBOL"; "INT"; "REF"}*/
"NAGSP" -> "ALIST"
/*"NAGSP" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NAGSP" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"NAGSP" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NAGSP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NAGSP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NAGSP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NAGSP" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NAGSP" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"NAGSP" -> {"RADCAT"; "PATMAB"; "CHARZ"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"NAGSP" -> {"LINEXP"; "CFCAT"; "STEP"}*/

```

"NREP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NREP"]

```

/*"NREP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"NREP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"NREP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/

```



```

/*"NREP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"NREP" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"NREP" -> {"ORDSET"; "SYMBOL"; "INT"; "REF"}*/
"NREP" -> "ALIST"
/*"NREP" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"NREP" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"}*/
/*"NREP" -> {"OINTDOM"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"NREP" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "QFCAT"; "FEVALAB"; "ELTAB"}*/
/*"NREP" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"}*/
/*"NREP" -> {"FPATMAB"; "TYPE"; "CHARNZ"; "PFECAT"; "UPOLYC"; "POLYC"}*/
/*"NREP" -> {"FAMR"; "AMR"; "FRETRCT"}*/

"NSDPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NSDPS"]
/*"NSDPS" -> {"LOCPOWC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"NSDPS" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"NSDPS" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"NSDPS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NSDPS" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPSCAT"; "PSCAT"; "AMR"}*/
/*"NSDPS" -> {"CHARZ"; "CHARNZ"; "ELTAB"; "DIFRING"; "PDRING"; "LZSTAGG"}*/
/*"NSDPS" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"NSDPS" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
/*"NSDPS" -> {"INT"; "BOOLEAN"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"NSDPS" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "RETRACT"; "LINEXP"}*/
/*"NSDPS" -> {"PATMAB"; "CFCAT"; "REAL"; "STEP"; "LIST"; "ILIST"; "SINT"}*/
/*"NSDPS" -> {"NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "LSAGG"; "FLAGG"}*/
/*"NSDPS" -> {"ELAGG"; "OM"; "SYMBOL"; "REF"}*/
"NSDPS" -> "ALIST"
/*"NSDPS" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"NSDPS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"NSDPS" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"NSDPS" -> {"BASTYPE-"}*/

"NUMFMT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NUMFMT"]
/*"NUMFMT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"}*/
/*"NUMFMT" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"NUMFMT" -> {"IXAGG-"; "STRICAT"; "SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"NUMFMT" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"NUMFMT" -> {"KOERCE"; "EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"NUMFMT" -> {"KONVERT"; "ORDSET"; "OM"; "BOOLEAN"; "SYMBOL"; "REF"}*/
"NUMFMT" -> "ALIST"
/*"NUMFMT" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"NUMFMT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"NUMFMT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"NUMFMT" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"NUMFMT" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"NUMFMT" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "PI"; "NNI"}*/
/*"NUMFMT" -> {"MONOID-"; "ABELSG-"; "SGROUP-"}*/

"OC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=OC"]
/*"OC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"OC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"OC" -> {"FRETRCT"; "RETRACT"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/
/*"OC" -> {"FINITE"; "ORDSET"; "KONVERT"; "CHARZ"; "CHARNZ"; "BOOLEAN"}*/

```

```

/*"OC" -> {"SYMBOL"; "INT"; "REF"}*/
"OC" -> "ALIST"
/*"OC" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"OC" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FIELD"}*/
/*"OC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"OC" -> {"RNS"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"OC" -> {"REAL"; "RADCAT"; "PATMAB"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"OC" -> {"LINEXP"; "CFCAT"; "STEP"}*/

"OC-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OC"]
/*"OC-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"OC-" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"OC-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"OC-" -> {"MODULE"; "RETRACT"; "FRETRCT"; "FEVALAB"; "ELTAB"}*/
/*"OC-" -> {"EVALAB"; "IEVALAB"; "FINITE"; "ORDSET"; "KONVERT"}*/
/*"OC-" -> {"CHARZ"; "CHARNZ"; "BOOLEAN"; "SYMBOL"; "INT"; "REF"}*/
"OC-" -> "ALIST"
/*"OC-" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"OC-" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"OC-" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ENTIRER"}*/
/*"OC-" -> {"UFD"; "DIVRING"; "RNS"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"OC-" -> {"OAMON"; "OASGP"; "REAL"; "RADCAT"; "PATMAB"; "INS"}*/
/*"OC-" -> {"OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/

"ODEPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODEPACK"]
/*"ODEPACK" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ODEPACK" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ODEPACK" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ODEPACK" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ODEPACK" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"ODEPACK" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"ODEPACK" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "LSAGG"; "STAGG"}*/
/*"ODEPACK" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"ODEPACK" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"ODEPACK" -> {"FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "INS-"}*/
/*"ODEPACK" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ODEPACK" -> {"ISTRING"; "SRAGG-"; "TBAGG"; "KDAGG"; "DIAGG"; "DIOPS"}*/
/*"ODEPACK" -> {"BGAGG"; "NNI"; "SYMBOL"; "REF"}*/
"ODEPACK" -> "ALIST"
/*"ODEPACK" -> {"FLAGG-"; "LNAGG-"; "DFLOAT"; "DIFRING"; "TRANFUN"}*/
/*"ODEPACK" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"ODEPACK" -> {"PI"; "VECTCAT"; "A1AGG"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"ODEPACK" -> {"VECTCAT-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/

"ODERAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODERAT"]
/*"ODERAT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODERAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODERAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ODERAT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ODERAT" -> {"UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"; "POLYCAT"}*/
/*"ODERAT" -> {"PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"; "EVALAB"}*/
/*"ODERAT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"ODERAT" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"}*/
/*"ODERAT" -> {"STEP"; "SYMBOL"; "INT"; "REF"}*/

```

```

"ODERAT" -> "ALIST"
/*"ODERAT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ODERAT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS-"}*/
/*"ODERAT" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"ODERAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"ODERAT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"ODERAT" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ILIST"}*/
/*"ODERAT" -> {"NNI"; "LSAGG-"; "STAGG-"; "INS"; "CFCAT"; "VECTOR"}*/
/*"ODERAT" -> {"IVECTOR"; "IARRAY1"; "VECTCAT"; "A1AGG"; "PI"}*/
/*"ODERAT" -> {"VECTCAT-"; "BOOLEAN"}*/

"OMERR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OMERR"]
/*"OMERR" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"OMERR" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"OMERR" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"OMERR" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "NNI"}*/
/*"OMERR" -> {"SYMBOL"; "REF"}*/
"OMERR" -> "ALIST"
/*"OMERR" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"OMERR" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG-"}*/
/*"OMERR" -> {"STAGG-"; "PI"}*/

"OMERRK" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OMERRK"]
/*"OMERRK" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"OMERRK" -> "ALIST"
/*"OMERRK" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"OMERRK" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"OPTPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OPTPACK"]
/*"OPTPACK" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"OPTPACK" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"OPTPACK" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OPTPACK" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"OPTPACK" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"OPTPACK" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"OPTPACK" -> {"RADCAT"; "PATMAB"; "CHARZ"; "STRING"; "CHAR"; "SINT"}*/
/*"OPTPACK" -> {"OUTFORM"; "LIST"; "INT"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"OPTPACK" -> {"SRAGG-"; "ILIST"; "TBAGG"; "KDAGG"; "DIAGG"; "DIOPS"}*/
/*"OPTPACK" -> {"BGAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"OPTPACK" -> {"CLAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "NNI"; "SYMBOL"; "REF"}*/
"OPTPACK" -> "ALIST"
/*"OPTPACK" -> {"FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"; "ELAGG-"; "INS-"}*/
/*"OPTPACK" -> {"DFLOAT"; "PI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"OPTPACK" -> {"FLAGG"; "ELAGG"; "OM"; "DIFRING"; "TRANFUN"; "TRIGCAT"}*/
/*"OPTPACK" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "EUCDOM-"}*/
/*"OPTPACK" -> {"UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"OPTPACK" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "ABELMON-"}*/

"OSI" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OSI"]
/*"OSI" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INT"; "SYMBOL"; "REF"}*/
"OSI" -> "ALIST"
/*"OSI" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"OSI" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

```

```

"OVAR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OVAR"]
/*"OVAR" -> {"ORDFIN"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "FINITE"}*/
/*"OVAR" -> {"KONVERT"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"OVAR" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"OVAR" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"OVAR" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"OVAR" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"OVAR" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INS"; "OINTDOM"}*/
/*"OVAR" -> {"DIFRING"; "LINEXP"; "CFCAT"; "STEP"; "LSAGG"; "STAGG"}*/
/*"OVAR" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"OVAR" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"OVAR" -> {"OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"OVAR" -> {"SYMBOL"; "REF"}*/
"OVAR" -> "ALIST"
/*"OVAR" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"OVAR" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"; "PI"}*/

"PACOFF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PACOFF"]
/*"PACOFF" -> {"PACFFC"; "FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"}*/
/*"PACOFF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PACOFF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PACOFF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PACOFF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"}*/
/*"PACOFF" -> {"FINITE"; "STEP"; "DIFRING"; "PACPERC"; "XF"; "RETRACT"}*/
/*"PACOFF" -> {"VSPACE"; "CHARZ"; "ORDSET"; "NNI"; "INT"; "PI"; "VECTOR"}*/
/*"PACOFF" -> {"IVECTOR"; "IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"}*/
/*"PACOFF" -> {"LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"PACOFF" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "MONOID-"; "ABELMON-"}*/
/*"PACOFF" -> {"SGROUP-"; "SINT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"PACOFF" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"PACOFF" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"}*/
/*"PACOFF" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"PACOFF" -> {"RCAGG-"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"PACOFF" -> {"FRETRCT"; "FLINEXP"; "LINEXP"; "PATMAB"; "PFECAT"; "DIFEXT"}*/
/*"PACOFF" -> {"SYMBOL"; "REF"}*
"PACOFF" -> "ALIST"
/*"PACOFF" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "ISTRING"; "SRAGG-"}*/
/*"PACOFF" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PACOFF" -> {"OASGP"; "CFCAT"; "REAL"; "BOOLEAN"; "OAMONS"}*/

"PACRAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PACRAT"]
/*"PACRAT" -> {"PACRATC"; "PACPERC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PACRAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PACRAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE" "SGROUP"}*/
/*"PACRAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PACRAT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"}*/
/*"PACRAT" -> {"XF"; "VSPACE"; "FPC"; "CHARNZ"; "FINITE"; "INS"; "OINTDOM"}*/
/*"PACRAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"PACRAT" -> {"DIFRING"; "KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"PACRAT" -> {"STEP"; "INT"; "NNI"; "PI"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"PACRAT" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"PACRAT" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"PACRAT" -> {"SETCAT-"; "BASTYPE-"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"PACRAT" -> {"VECTCAT-"; "A1AGG-"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/

```

```

/*"PACRAT" -> {"AMR"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/
/*"PACRAT" -> {"ELTAB"; "DIFEXT"; "SYMBOL"; "REF"}*/
"PACRAT" -> "ALIST"
/*"PACRAT" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "ISTRING"}*/
/*"PACRAT" -> {"SRAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"PACRAT" -> {"TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"PACRAT" -> {"OM"; "BOOLEAN"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"}*/

"PATTERN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PATTERN"]
/*"PATTERN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"; "SYMBOL"; "INT"}*/
/*"PATTERN" -> "REF"*/
"PATTERN" -> "ALIST"
/*"PATTERN" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"PATTERN" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"PATTERN" -> {"NNI"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"PATTERN" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/
/*"PATTERN" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"}*/
/*"PATTERN" -> {"ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"PATTERN" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"PATTERN" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "PATMAB"; "MONOID"}*/
/*"PATTERN" -> {"SGROUP"; "ABELMON"; "ABELSG"; "PI"}*/

"PLCS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PLCS"]
/*"PLCS" -> {"PLACESC"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"}*/
/*"PLCS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"PLCS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"PLCS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PLCS" -> {"UFD"; "DIVRING"}*/
"PLCS" -> "ALIST"
/*"PLCS" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"; "DIFRING"}*/
/*"PLCS" -> {"PDRING"; "SYMBOL"; "INT"; "REF"; "LOCPOWC"; "LIST"; "STRING"}*/
/*"PLCS" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"PLCS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PLCS" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"PLCS" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"}*/
/*"PLCS" -> {"ELAGG"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"PLCS" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"PLCS" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "PI"; "NNI"; "BOOLEAN"}*/

"PMKERNEL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMKERNEL"]
/*"PMKERNEL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDSET"; "RETRACT"}*/
/*"PMKERNEL" -> {"KONVERT"; "PATMAB"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"PMKERNEL" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"PMKERNEL" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"PMKERNEL" -> {"OM"; "INT"; "LIST"; "ILIST"; "NNI"; "SYMBOL"; "REF"}*/
"PMKERNEL" -> "ALIST"
/*"PMKERNEL" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"PMKERNEL" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "MONOID"; "SGROUP"}*/
/*"PMKERNEL" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "ABELMON"; "ABELSG"}*/

"PMSYM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMSYM"]
/*"PMSYM" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ORDSET"; "SYMBOL"; "INT"}*/
/*"PMSYM" -> "REF"*/
"PMSYM" -> "ALIST"

```

```

/*"PMSYM" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"PMSYM" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"POLY" [color="#88FF44",href="bookvol10.3.pdf#nameddest=POLY"]
/*"POLY" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"POLY" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"POLY" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"POLY" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"POLY" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"POLY" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
/*"POLY" -> {"PFECAT"; "UFD"; "SYMBOL"; "INT"; "REF"}*/
"POLY" -> "ALIST"
/*"POLY" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"POLY" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"}*/
/*"POLY" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "DIVRING"; "ORDRING"}*/
/*"POLY" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RADCAT"}*/
/*"POLY" -> {"INS"; "OINTDOM"; "DIFRING"; "CFCAT"; "STEP"; "UPOLYC"}*/
/*"POLY" -> {"ELTAB"; "DIFEXT"}*/

"PRIMELT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PRIMELT"]
/*"PRIMELT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PRIMELT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PRIMELT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PRIMELT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PRIMELT" -> {"UFD"; "DIVRING"; "CHARZ"; "SINT"; "NNI"; "INT"; "INS-"}*/
/*"PRIMELT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PRIMELT" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"PRIMELT" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/
/*"PRIMELT" -> {"PATMAB"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"PRIMELT" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"PRIMELT" -> {"CLAGG-"; "SYMBOL"; "REF"}*/
"PRIMELT" -> "ALIST"
/*"PRIMELT" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"PRIMELT" -> {"SRAGG-"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"PRIMELT" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PFECAT"}*/

"QALGSET2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=QALGSET2"]
/*"QALGSET2" -> {"SYMBOL"; "INT"; "REF"}*/
"QALGSET2" -> "ALIST"
/*"QALGSET2" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"QALGSET2" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"QALGSET2" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"QALGSET2" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"QALGSET2" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"QALGSET2" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"QALGSET2" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"QALGSET2" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"QALGSET2" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"QALGSET2" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"QALGSET2" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"}*/
/*"QALGSET2" -> {"FPATMAB"; "TYPE"; "CHARNZ"; "PFECAT"; "DIRPCAT"; "IXAGG"}*/
/*"QALGSET2" -> {"HOAGG"; "AGG"; "ELTAGG"; "FRETRCT"; "FINITE"; "OAMONS"}*/
/*"QALGSET2" -> {"VSPACE"; "ORDFIN"; "POLYCAT"; "FAMR"; "AMR"; "LSAGG"}*/
/*"QALGSET2" -> {"STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "CLAGG"; "FLAGG"}*/

```

```

/"QALGSET2" -> {"ELAGG"; "OM"; "BOOLEAN"}*/

"QEQUAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QEQUAT"]
/"QEQUAT" -> {"KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"QEQUAT" -> "ALIST"
/"QEQUAT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/"QEQUAT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"QUATCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=QUATCAT"]
/"QUATCAT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/"QUATCAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/"QUATCAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/"QUATCAT" -> {"FRETRCT"; "RETRACT"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/"QUATCAT" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/"QUATCAT" -> {"ENTIRER"; "ORDSET"; "DIVRING"; "KONVERT"; "CHARZ"; "CHARNZ"}*/
/"QUATCAT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "UFD"}*/
/"QUATCAT" -> {"BOOLEAN"; "SYMBOL"; "INT"; "REF"}*/
"QUATCAT" -> "ALIST"
/"QUATCAT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/"QUATCAT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "RNS"}*/
/"QUATCAT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/"QUATCAT" -> {"RADCAT"; "PATMAB"; "INS"; "OINTDOM"; "CFCAT"; "STEP"}*/

"QUATCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QUATCAT"]
/"QUATCAT-" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/"QUATCAT-" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/"QUATCAT-" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/"QUATCAT-" -> {"ALGEBRA"; "MODULE"; "FRETRCT"; "RETRACT"; "DIFEXT"}*/
/"QUATCAT-" -> {"DIFRING"; "PDRING"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/"QUATCAT-" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ENTIRER"; "ORDSET"}*/
/"QUATCAT-" -> {"DIVRING"; "KONVERT"; "CHARZ"; "CHARNZ"; "FIELD"}*/
/"QUATCAT-" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "UFD"; "BOOLEAN"}*/
/"QUATCAT-" -> {"SYMBOL"; "INT"; "REF"}*/
"QUATCAT-" -> "ALIST"
/"QUATCAT-" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/"QUATCAT-" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/"QUATCAT-" -> {"RNS"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/"QUATCAT-" -> {"OASGP"; "REAL"; "RADCAT"; "PATMAB"; "INS"; "OINTDOM"}*/
/"QUATCAT-" -> {"CFCAT"; "STEP"}*/

"RECLOS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RECLOS"]
/"RECLOS" -> {"RCFIELD"; "CHARZ"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/"RECLOS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/"RECLOS" -> {"MONOID"; "LMODULE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/"RECLOS" -> {"OASGP"; "ORDSET"; "COMRING"; "BMODULE"; "RMODULE"; "FIELD"}*/
/"RECLOS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"; "MODULE"}*/
/"RECLOS" -> {"ENTIRER"; "UFD"; "DIVRING"; "FRETRCT"; "RETRACT"; "RADCAT"}*/
/"RECLOS" -> {"REAL"; "KONVERT"; "PI"; "NNI"; "INT"; "SYMBOL"; "REF"}*/
"RECLOS" -> "ALIST"
/"RECLOS" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/"RECLOS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"}*/
/"RECLOS" -> {"OINTDOM"; "DIFRING"; "LINEXP"; "PATMAB"; "CFCAT"; "STEP"}*/
/"RECLOS" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"}*/
/"RECLOS" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/

```

```

/*"RECLOS" -> {"SETCAT-"; "BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"RECLOS" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"RECLOS" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"RECLOS" -> {"OM"; "BOOLEAN"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PDRING"}*/
/*"RECLOS" -> {"FLINEXP"; "PATAB"; "FPATMAB"; "CHARNZ"; "PFECAT"}*/

"REP1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REP1"]
/*"REP1" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"REP1" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"REP1" -> {"INT"; "SINT"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"REP1" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"REP1" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"REP1" -> {"OASGP"; "ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"REP1" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "LIST"}*/
/*"REP1" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"REP1" -> {"LNAGG-"; "NNI"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"REP1" -> {"A1AGG-"; "IXAGG-"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"REP1" -> {"IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "ELTAGG"}*/
/*"REP1" -> {"ELTAB"; "CLAGG"; "PI"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"REP1" -> {"RCAGG"; "ELAGG"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"REP1" -> {"FRETRCT"; "FLINEXP"; "PFECAT"; "SYMBOL"; "REF"}*/
"REP1" -> "ALIST"
/*"REP1" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "ISTRING"; "SRAGG-"}*/

"RESULT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RESULT"]
/*"RESULT" -> {"TBAGG"; "KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"}*/
/*"RESULT" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"}*/
/*"RESULT" -> {"CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"; "ORDSET"}*/
/*"RESULT" -> {"SYMBOL"; "INT"; "REF"}*/
"RESULT" -> "ALIST"
/*"RESULT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"RESULT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"}*/
/*"RESULT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "FLAGG"}*/
/*"RESULT" -> {"ELAGG"; "OM"; "ILIST"}*/

"RFFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RFFACT"]
/*"RFFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RFFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RFFACT" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"RFFACT" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"RFFACT" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"RFFACT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"RFFACT" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"RFFACT" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"RFFACT" -> {"SYMBOL"; "INT"; "REF"}*/
"RFFACT" -> "ALIST"
/*"RFFACT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"RFFACT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"}*/
/*"RFFACT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RFFACT" -> {"CFCAT"; "REAL"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"}*/
/*"RFFACT" -> "TYPE"*/

"RMATRIX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RMATRIX"]
/*"RMATRIX" -> {"RMATCAT"; "BMODULE"; "LMODULE"; "ABELGRP"; "CABMON"}*/

```



```

/*"RMATRIX" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RMATRIX" -> {"RMODULE"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"RMATRIX" -> {"MODULE"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"RMATRIX" -> {"VSPACE"; "KONVERT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"RMATRIX" -> {"INTDOM"; "ALGEBRA"; "ENTIRER"; "UFD"; "DIVRING"; "NNI"}*/
/*"RMATRIX" -> {"INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"RMATRIX" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ORDSET"}*/
/*"RMATRIX" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "SYMBOL"; "REF"}*/
"RMATRIX" -> "ALIST"
/*"RMATRIX" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"RMATRIX" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"ROMAN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ROMAN"]
/*"ROMAN" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"ROMAN" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"ROMAN" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ROMAN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"ROMAN" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ROMAN" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"ROMAN" -> {"REAL"; "CHARZ"; "STEP"; "SYMBOL"; "INT"; "REF"}*/
"ROMAN" -> "ALIST"
/*"ROMAN" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ROMAN" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"ROUTINE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ROUTINE"]
/*"ROUTINE" -> {"TBAGG"; "KDAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"}*/
/*"ROUTINE" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"ROUTINE" -> {"IEVALAB"; "CLAGG"; "KONVERT"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"ROUTINE" -> {"ORDSET"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"}*/
/*"ROUTINE" -> {"INT"; "PRIMARR"; "A1AGG-"; "ISTRING"; "BOOLEAN"; "ILIST"}*/
/*"ROUTINE" -> {"LSAGG-"; "STAGG-"; "PI"; "NNI"; "SYMBOL"; "REF"}*/
"ROUTINE" -> "ALIST"
/*"ROUTINE" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"ROUTINE" -> {"RCAGG"; "LNAGG"; "FLAGG"; "ELAGG"; "OM"}*/

"RPOLCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RPOLCAT"]
/*"RPOLCAT" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"RPOLCAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RPOLCAT" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"RPOLCAT" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"RPOLCAT" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"RPOLCAT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"RPOLCAT" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "OAMONS"; "OCAMON"}*/
/*"RPOLCAT" -> {"OAMON"; "OASGP"; "NNI"; "INT"; "LIST"; "BOOLEAN"; "ILIST"}*/
/*"RPOLCAT" -> {"EUCDOM"; "PID"; "FIELD"; "DIVRING"; "FINITE"; "SINT"}*/
/*"RPOLCAT" -> {"OM"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "INS"}*/
/*"RPOLCAT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "DIFRING"; "CFCAT"; "REAL"}*/
/*"RPOLCAT" -> {"STEP"; "QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"; "PATAB"}*/
/*"RPOLCAT" -> {"FPATMAB"; "TYPE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"RPOLCAT" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"RPOLCAT" -> {"FLAGG"; "ELAGG"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"}*/
/*"RPOLCAT" -> {"A1AGG-"; "ISTRING"; "SYMBOL"; "REF"}*/
"RPOLCAT" -> "ALIST"
/*"RPOLCAT" -> {"SRAGG-"; "LNAGG-"; "STRICAT"; "SRAGG"; "A1AGG"}*/

```

```

/*"RPOLCAT" -> {"FPS"; "RNS"; "RADCAT"}*/

"RPOLCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RPOLCAT"]
/*"RPOLCAT-" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RPOLCAT-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RPOLCAT-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"}*/
/*"RPOLCAT-" -> {"AMR"; "BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"}*/
/*"RPOLCAT-" -> {"MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"RPOLCAT-" -> {"FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"RPOLCAT-" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
/*"RPOLCAT-" -> {"PFECAT"; "UFD"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RPOLCAT-" -> {"NNI"; "INT"; "LIST"; "BOOLEAN"; "ILIST"; "EUCDOM"}*/
/*"RPOLCAT-" -> {"PID"; "FIELD"; "DIVRING"; "FINITE"; "SINT"; "OM"}*/
/*"RPOLCAT-" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "INS"}*/
/*"RPOLCAT-" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "DIFRING"; "CFCAT"}*/
/*"RPOLCAT-" -> {"REAL"; "STEP"; "QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/*"RPOLCAT-" -> {"PATAB"; "FPATMAB"; "TYPE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"RPOLCAT-" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"RPOLCAT-" -> {"CLAGG"; "FLAGG"; "ELAGG"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"RPOLCAT-" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SYMBOL"; "REF"}*/
"RPOLCAT-" -> "ALIST"
/*"RPOLCAT-" -> {"SRAGG-"; "LNAGG-"; "STRICAT"; "SRAGG"; "A1AGG"}*/
/*"RPOLCAT-" -> {"FPS"; "RNS"; "RADCAT"}*/

"RULECOLD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RULECOLD"]
/*"RULECOLD" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"RULECOLD" -> "ALIST"
/*"RULECOLD" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"RULECOLD" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"RULECOLD" -> "BOOLEAN"*/

"SAOS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SAOS"]
/*"SAOS" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"}*/
/*"SAOS" -> {"INT"; "REF"}*/
"SAOS" -> "ALIST"
/*"SAOS" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"SAOS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"SCCELL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SCCELL"]
/* "SCCELL" -> {"KOERCE"; "RCFIELD"; "CHARZ"; "RING"; "RNG"; "ABELGRP"} */
/* "SCCELL" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"} */
/* "SCCELL" -> {"SGROUP"; "MONOID"; "LMODULE"; "ORDRING"; "OAGROUP"} */
/* "SCCELL" -> {"OCAMON"; "OAMON"; "OASGP"; "COMRING"; "BMODULE"} */
/* "SCCELL" -> {"RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"} */
/* "SCCELL" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "LORER"; "UFD"; "DIVRING"} */
/* "SCCELL" -> {"FRETRACT"; "RETRACT"; "RADCAT"; "UPOLYC"; "POLYCAT"; "FAMR"} */
/* "SCCELL" -> {"AMR"; "CHARZ"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"} */
/* "SCCELL" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"} */
/* "SCCELL" -> {"STEP"; "SYMBOL"; "INT"; "REF"} */
"SCCELL" -> "ALIST"
/* "SCCELL" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"} */
/* "SCCELL" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"} */
/* "SCCELL" -> {"BOOLEAN"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"} */
/* "SCCELL" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"} */

```

```

/* "SCCELL" -> {"FLAGG"; "ELAGG"; "OM"; "PI"; "NNI"; "LSAGG-"; "STAGG-"} */
/* "SCCELL" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"} */
/* "SCCELL" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"} */

"SEGBIND" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SEGBIND"]
/*"SEGBIND" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"}*/
/*"SEGBIND" -> "REF"*/
"SEGBIND" -> "ALIST"
/*"SEGBIND" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"SEGBIND" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"SEGBIND" -> "BOOLEAN"*/

"SEM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SEM"]
"SEM" -> "ALIST"
/*"SEM" -> {"A1AGG", "A1AGG-", "ABELGRP", "ABELMON", "ABELMON-"; */
/*"SEM" -> {"ABELSG", "ABELSG-", "AGG", "AGG-", "ALGEBRA", "ALIST"; */
/*"SEM" -> {"BASTYPE", "BASTYPE-", "BMODULE", "BOOLEAN", "CABMON"; */
/*"SEM" -> {"CFCAT", "CHAR", "CHARNZ", "CHARZ", "CLAGG", "CLAGG-"; */
/*"SEM" -> {"COMRING", "DIFEXT", "DIFRING", "DIVRING", "ELAGG"; */
/*"SEM" -> {"ELAGG-", "ELTAB", "ELTAGG", "ELTAGG-", "ENTIRER"; */
/*"SEM" -> {"EUCDOM", "EVALAB", "FEVALAB", "FIELD", "FLAGG", "FLAGG-"; */
/*"SEM" -> {"FLINEXP", "FPATMAB", "GCDDOM", "HOAGG", "HOAGG-"; */
/*"SEM" -> {"IARRAY1", "IEVALAB", "ILIST", "INS", "INT", "INTDOM"; */
/*"SEM" -> {"ISTRING", "IVECTOR", "IXAGG", "IXAGG-", "KOERCE"; */
/*"SEM" -> {"KONVERT", "LINEXP", "LIST", "LMODULE", "LNAGG", "LNAGG-"; */
/*"SEM" -> {"LORER", "LSAGG", "LSAGG-", "MODULE", "MONOID", "MONOID-"; */
/*"SEM" -> {"NNI", "OAGROUP", "OAMON", "OASGP", "OCAMON", "OINTDOM"; */
/*"SEM" -> {"OM", "ORDRING", "ORDSET", "ORDSET-", "OUTFORM", "PATAB"; */
/*"SEM" -> {"PATMAB", "PDRING", "PFECAT", "PI", "PID", "PRIMARR"; */
/*"SEM" -> {"QFCAT", "RCAGG", "RCAGG-", "REAL", "REF", "RETRACT"; */
/*"SEM" -> {"RING", "RMODULE", "RNG", "SETCAT", "SETCAT-", "SGROUP"; */
/*"SEM" -> {"SGROUP-", "SINT", "SRAGG-", "STAGG", "STAGG-", "STEP"; */
/*"SEM" -> {"STRING", "SYMBOL", "TYPE", "UFD", "URAGG", "URAGG-"; */
/*"SEM" -> {"VECTCAT", "VECTCAT-", "VECTOR"; */

"SET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SET"]
/*"SET" -> {"FSAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SET" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "CLAGG"}*/
/*"SET" -> {"KONVERT"; "SETAGG"; "FINITE"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"SET" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "ORDSET"; "ELAGG"; "INS"; "UFD"}*/
/*"SET" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SET" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SET" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"}*/
/*"SET" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"SET" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"SET" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "SYMBOL"; "INT"; "REF"}*/
"SET" -> "ALIST"
/*"SET" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"SET" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"}*/
/*"SET" -> {"STAGG"; "URAGG"; "RCAGG"; "ILIST"; "NNI"; "BOOLEAN"}*/

"SPECOUT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SPECOUT"]
/*"SPECOUT" -> {"SYMBOL"; "INT"; "REF"}*/
"SPECOUT" -> "ALIST"

```

```

/*"SPECOUT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"SPECOUT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"SQMATRIX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SQMATRIX"]
/*"SQMATRIX" -> {"SMATCAT"; "DIFEXT"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SQMATRIX" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SQMATRIX" -> {"SGROUP"; "MONOID"; "LMODULE"; "DIFRING"; "PDRING"}*/
/*"SQMATRIX" -> {"BMODULE"; "RMODULE"; "RMATCAT"; "HOAGG"; "AGG"; "TYPE"}*/
/*"SQMATRIX" -> {"EVALAB"; "IEVALAB"; "MODULE"; "COMRING"; "FRETRCT"}*/
/*"SQMATRIX" -> {"RETRACT"; "FLINEXP"; "LINEXP"; "ALGEBRA"; "KONVERT"}*/
/*"SQMATRIX" -> {"NNI"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"SQMATRIX" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"SQMATRIX" -> {"ORDSET"; "ELAGG"; "OM"; "LIST"; "ILIST"; "EUCDOM"}*/
/*"SQMATRIX" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "FIELD"; "UFD"}*/
/*"SQMATRIX" -> {"DIVRING"; "SYMBOL"; "REF"}*/
"SQMATRIX" -> "ALIST"
/*"SQMATRIX" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"SQMATRIX" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"; "OINTDOM"}*/
/*"SQMATRIX" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "PATMAB"}*/
/*"SQMATRIX" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/

"SWITCH" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SWITCH"]
/*"SWITCH" -> {"KOERCE"; "INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"SWITCH" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"}*/
/*"SWITCH" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SWITCH" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INS"}*/
/*"SWITCH" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"SWITCH" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"SWITCH" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"SWITCH" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"SWITCH" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "RETRACT"; "LINEXP"}*/
/*"SWITCH" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "NNI"}*/
/*"SWITCH" -> {"SYMBOL"; "REF"}*/
"SWITCH" -> "ALIST"
/*"SWITCH" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"SWITCH" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"SYMS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SYMS"]
/*"SYMS" -> {"KOERCE"; "ORDSET"; "SETCAT"; "BASTYPE"; "SYMBOL"; "INT"; "REF"}*/
"SYMS" -> "ALIST"
/*"SYMS" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"SYMS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/

"SYMTAB" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SYMTAB"]
/*"SYMTAB" -> {"KOERCE"; "ORDSET"; "SETCAT"; "BASTYPE"; "INS"; "UFD"}*/
/*"SYMTAB" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SYMTAB" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SYMTAB" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"SYMTAB" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SYMTAB" -> {"OAMON"; "OASGP"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"SYMTAB" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "INT"; "LIST"}*/
/*"SYMTAB" -> {"ILIST"; "OM"; "SYMBOL"; "REF"}*/
"SYMTAB" -> "ALIST"
/*"SYMTAB" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/

```

```

/"SYMTAB" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"}*/
/"SYMTAB" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/"SYMTAB" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/

"SYSSOLP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SYSSOLP"]
/"SYSSOLP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/"SYSSOLP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/"SYSSOLP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/"SYSSOLP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "POLYCAT"; "PDRING"}*/
/"SYSSOLP" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/"SYSSOLP" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/"SYSSOLP" -> {"KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "QFCAT"}*/
/"SYSSOLP" -> {"FIELD"; "EUCDOM"; "PID"; "DIVRING"; "FEVALAB"; "ELTAB"}*/
/"SYSSOLP" -> {"DIFEXT"; "DIFRING"; "PATAB"; "FPATMAB"; "TYPE"; "STEP"}*/
/"SYSSOLP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/"SYSSOLP" -> {"OASGP"; "REAL"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/"SYSSOLP" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LSAGG"; "STAGG"}*/
/"SYSSOLP" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/"SYSSOLP" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "NNI"; "SYMBOL"; "REF"}*/
"SYSSOLP" -> "ALIST"
/"SYSSOLP" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/"SYSSOLP" -> {"ISTRING"; "SRAGG-"; "LNAGG-"; "BOOLEAN"; "DIRPCAT"}*/
/"SYSSOLP" -> {"FINITE"; "OAMONS"; "VSPACE"; "ORDFIN"; "VECTOR"; "IVECTOR"}*/
/"SYSSOLP" -> {"IARRAY1"; "VECTCAT-"; "VECTCAT"; "A1AGG"}*/

"UTSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=UTSCAT"]
/"UTSCAT" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "SETCAT"}*/
/"UTSCAT" -> {"BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/"UTSCAT" -> {"UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/"UTSCAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "COMRING"}*/
/"UTSCAT" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/"UTSCAT" -> {"ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/"UTSCAT" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "BOOLEAN"; "INT"}*/
/"UTSCAT" -> {"SYMBOL"; "REF"}*/
"UTSCAT" -> "ALIST"
/"UTSCAT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/"UTSCAT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/"UTSCAT" -> {"NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/"UTSCAT" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/"UTSCAT" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"}*/
/"UTSCAT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/"UTSCAT" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "RETRACT"; "LINEXP"}*/
/"UTSCAT" -> {"PATMAB"; "CFCAT"; "REAL"; "STEP"}*/

"UTSCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UTSCAT"]
/"UTSCAT-" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/"UTSCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"}*/
/"UTSCAT-" -> {"CABMON"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"}*/
/"UTSCAT-" -> {"ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/"UTSCAT-" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/"UTSCAT-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/
/"UTSCAT-" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/"UTSCAT-" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "BOOLEAN"; "INT"}*/
/"UTSCAT-" -> {"SYMBOL"; "REF"}*/

```

```

"UTSCAT-" -> "ALIST"
/*"UTSCAT-" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"UTSCAT-" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"UTSCAT-" -> {"LNAGG-"; "ILIST"; "NNI"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"UTSCAT-" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"UTSCAT-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"UTSCAT-" -> {"ELAGG"; "OM"; "LSAGG-"; "FIELD"; "EUCDOM"; "PID"}*/
/*"UTSCAT-" -> {"GCDDOM"; "UFD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"UTSCAT-" -> {"DAGROUP"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"UTSCAT-" -> {"REAL"; "STEP"}*/

"VARIABLE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=VARIABLE"]
/*"VARIABLE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SYMBOL"; "INT"; "REF"}*/
"VARIABLE" -> "ALIST"
/*"VARIABLE" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"VARIABLE" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"VARIABLE" -> "BOOLEAN"*/

```

1.4.19 Layer17

Depends on: ACF COMPCAT FFCAT FRNAALG FS OC QUATCAT RPOLCAT UTSCAT NSDPS

Used by next layer: ACFS EXPRSOL FDIVCAT UFPS ULSCCAT UTSSOL

The cliquel1.spad file is used because "MYEXPR" and "MYUP" are mutually dependent. Rather than add one to the bootstrap we let the compiler resolve them in one step. This same technique might be useful for other cliques in bootstrap. This needs to be investigated.

— layer17 —

```

LAYER17=\
  ${OUT}/ACFS.o      ${OUT}/ACFS-.o      ${OUT}/AF.o      ${OUT}/AFFPLPS.o \
  ${OUT}/ALGFACT.o  \
  ${OUT}/ALGFF.o     ${OUT}/ALGMANIP.o  ${OUT}/ALGMFACT.o  ${OUT}/ALGPKG.o  \
  ${OUT}/ALGSC.o     ${OUT}/AN.o      ${OUT}/APPRULE.o  ${OUT}/ASP19.o  \
  ${OUT}/ASP20.o     ${OUT}/ASP31.o    ${OUT}/ASP35.o    ${OUT}/ASP41.o  \
  ${OUT}/ASP42.o     ${OUT}/ASP74.o    ${OUT}/ASP77.o    ${OUT}/ASP80.o  \
  ${OUT}/CDFMAT.o    ${OUT}/CDFVEC.o    ${OUT}/CELL.o \
  ${OUT}/CINTSLPE.o  ${OUT}/COMBF.o    ${OUT}/COMPFAC.o  ${OUT}/COMPLEX.o \
  ${OUT}/COMPLPAT.o  ${OUT}/CMLXRT.o    ${OUT}/CPMATCH.o  ${OUT}/CRFP.o   \
  ${OUT}/CTRIGMNP.o  ${OUT}/DO1WGTS.o    ${OUT}/DO2AGNT.o  ${OUT}/DO3EEFA.o \
  ${OUT}/DBLRESP.o   ${OUT}/DO1AGNT.o    ${OUT}/DERHAM.o   ${OUT}/DFSFUN.o  \
  ${OUT}/DRAWCURV.o  ${OUT}/DTP.o      \
  ${OUT}/DO1TRNS.o   ${OUT}/EO4NAFA.o    ${OUT}/EF.o      \
  ${OUT}/EFSTRUC.o   ${OUT}/ELFUTS.o    ${OUT}/ESTOOLS.o  ${OUT}/EXPEXPAN.o \
  ${OUT}/EXPRODE.o   ${OUT}/EXPTUBE.o    ${OUT}/EXPR2.o    ${OUT}/FC.o      \
  ${OUT}/FDIVCAT.o   ${OUT}/FDIVCAT-.o    ${OUT}/FDIV2.o    ${OUT}/FFCAT2.o  \
  ${OUT}/FLOATCP.o   ${OUT}/FORDER.o    ${OUT}/FORTRAN.o  ${OUT}/FRNAAF2.o \
  ${OUT}/FSPRMELT.o  ${OUT}/FSRED.o     ${OUT}/FSUPFACT.o  ${OUT}/FSPECF.o  \
  ${OUT}/FS2.o       ${OUT}/FS2UPS.o    ${OUT}/GAUSSFAC.o  ${OUT}/GCNAALG.o \
  ${OUT}/GDRAW.o     \

```

```

${OUT}/GENUFACT.o ${OUT}/GENUPS.o ${OUT}/GTSET.o ${OUT}/GPOLSET.o \
${OUT}/IAN.o ${OUT}/INEP.o ${OUT}/INFPRDO.o ${OUT}/INFSP.o \
${OUT}/INPRODPF.o ${OUT}/INPRODPF.o ${OUT}/INTAF.o ${OUT}/INTALG.o \
${OUT}/INTEF.o ${OUT}/INTGO.o ${OUT}/INTHERAL.o ${OUT}/INTPAF.o \
${OUT}/INTPM.o ${OUT}/INTTOOLS.o ${OUT}/ITRIGMNP.o ${OUT}/JORDAN.o \
${OUT}/KOVACIC.o ${OUT}/LF.o ${OUT}/LIE.o ${OUT}/LODOF.o \
${OUT}/LSQM.o ${OUT}/MCMPLX.o ${OUT}/MULTFACT.o \
${MID}/clique1.spad \
${OUT}/NAGFO1.o ${OUT}/NAGFO2.o ${OUT}/NAGFO4.o ${OUT}/NCEP.o \
${OUT}/NLINSOL.o ${OUT}/NSMP.o ${OUT}/NUMERIC.o ${OUT}/OCT.o \
${OUT}/OCTCT2.o ${OUT}/ODEPAL.o ${OUT}/ODERTRIC.o ${OUT}/OMEXPR.o \
${OUT}/PACEXTC.o ${OUT}/PADE.o \
${OUT}/PAN2EXPR.o ${OUT}/PFO.o ${OUT}/PFOQ.o ${OUT}/PICOERCE.o \
${OUT}/PLACES.o ${OUT}/PLACESPS.o \
${OUT}/PMASFS.o ${OUT}/PMFS.o ${OUT}/PMPREDFS.o ${OUT}/PROJPLPS.o \
${OUT}/PSETPK.o \
${OUT}/QUAT.o ${OUT}/QUATCT2.o ${OUT}/RADFF.o ${OUT}/RDEEF.o \
${OUT}/RDEEFS.o ${OUT}/RDIV.o ${OUT}/RSETCAT.o ${OUT}/RSETCAT-.o \
${OUT}/RSETGCD.o ${OUT}/RULE.o ${OUT}/RULESET.o ${OUT}/SD.o \
${OUT}/SIGNEF.o ${OUT}/SIMPAN.o ${OUT}/SFORT.o ${OUT}/SOLVESER.o \
${OUT}/SOLVETRA.o ${OUT}/SUMFS.o ${OUT}/SUTS.o ${OUT}/TOOLSIGN.o \
${OUT}/TRIGMNIP.o ${OUT}/TRMANIP.o ${OUT}/UFPS.o ${OUT}/ULSCCAT.o \
${OUT}/ULSCCAT-.o ${OUT}/UPXSSING.o ${OUT}/UTSODE.o ${OUT}/UTSODETL.o \
${OUT}/UTSSOL.o ${OUT}/UTS2.o ${OUT}/WUTSET.o \
layer17done

```

— layerpic —

```

/* layer 17 */
/* depends on: ACF COMPCAT FFCAT FRNAALG FS OC QUATCAT RPOLCAT UTSCAT */

"ACFS" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ACFS"]
"ACFS" -> "ACF"
/*"ACFS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ACFS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ACFS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ACFS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ACFS" -> {"UFD"; "DIVRING"; "RADCAT"}*/
"ACFS" -> "FS"
/*"ACFS" -> {"ES"; "ORDSET"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"ACFS" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"}*/
/*"ACFS" -> {"PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "INT"}*/
/*"ACFS" -> {"LIST"; "ILIST"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"ACFS" -> {"PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "NNI"}*/

"ACFS-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ACFS"]
"ACFS-" -> "ACF"
/*"ACFS-" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ACFS-" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ACFS-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ACFS-" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/

```

```

/*"ACFS-" -> {"ENTIRER"; "UFD"; "DIVRING"; "RADCAT"}*/
"ACFS-" -> "FS"
/*"ACFS-" -> {"ES"; "ORDSET"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"ACFS-" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRACT"}*/
/*"ACFS-" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"}*/
/*"ACFS-" -> {"INT"; "LIST"; "ILIST"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"ACFS-" -> {"AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"ACFS-" -> "NNI"*/

"AF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=AF"]
/*"AF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"}*/
/*"AF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"AF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"AF" -> {"MODULE"; "ENTIRER"}*/
"AF" -> "FS"
/*"AF" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"AF" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRACT"; "GROUP"; "PDRING"}*/
/*"AF" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"AF" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "SYMBOL"; "INT"; "REF"}*/
/*"AF" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"AF" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/
/*"AF" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "UPOLYC"; "POLYCAT"}*/
/*"AF" -> {"FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"}*/
/*"AF" -> {"STEP"; "NNI"}*/
"AF" -> "ACF"
/*"AF" -> {"RADCAT"; "BOOLEAN"; "CACHSET"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"AF" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "INS-"}*/

"AFFPLPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AFFPLPS"]
/*"AFFPLPS" -> {"AFSPCAT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"AFFPLPS" -> "PACFFC"
/*"AFFPLPS" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"AFFPLPS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"AFFPLPS" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"AFFPLPS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"AFFPLPS" -> {"UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"; "DIFRING"}*/
/*"AFFPLPS" -> {"PACPERC"; "PACOFF"; "AFFPL"}*/

"ALGFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ALGFACT"]
/*"ALGFACT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ALGFACT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ALGFACT" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"ALGFACT" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"ALGFACT" -> {"INTDOM"; "ENTIRER"; "FRETRACT"; "RETRACT"; "EVALAB"}*/
/*"ALGFACT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"ALGFACT" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"ALGFACT" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
/*"ALGFACT" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ES"; "LSAGG"}*/
/*"ALGFACT" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "LNAGG"}*/
/*"ALGFACT" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"ALGFACT" -> {"CACHSET"; "PATAB"; "ELAGG-"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"ALGFACT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"ALGFACT" -> {"QFCAT"; "FEVALAB"; "FPATMAB"}*/
"ALGFACT" -> "ACF"

```



```

/*"ALGFACT" -> {"RADCAT"; "NNI"; "BOOLEAN"; "MONOGEN"; "FRAMALG"; "FINRALG"}*/
/*"ALGFACT" -> {"FINITE"; "FFIELDC"; "FPC"}*/

"ALGFF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ALGFF"]
/*"ALGFF" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ALGFF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ALGFF" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"ALGFF" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"ALGFF" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"ALGFF" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"ALGFF" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "ELTAB"; "DIFRING"}*/
/*"ALGFF" -> {"DIFEXT"; "STEP"; "EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
"ALGFF" -> "FFCAT"
/*"ALGFF" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"ALGFF" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"ALGFF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"ALGFF" -> {"BOOLEAN"; "NNI"; "INT"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"ALGFF" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"; "SINT"; "INS"}*/
/*"ALGFF" -> {"CFCAT"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"ALGFF" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"ALGFF" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "OAMONS"}*/

"ALGMANIP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ALGMANIP"]
/*"ALGMANIP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ALGMANIP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ALGMANIP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ALGMANIP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "FIELD"; "EUCDOM"}*/
/*"ALGMANIP" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "ES"; "ORDSET"}*/
/*"ALGMANIP" -> {"RETRACT"; "IEVALAB"; "EVALAB"; "SYMBOL"; "INT"; "REF"}*/
/*"ALGMANIP" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"ALGMANIP" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"ALGMANIP" -> {"LNAGG-"; "ILIST"; "LSAGG-"; "CACHSET"; "UPOLYC"}*/
/*"ALGMANIP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"ALGMANIP" -> {"FRETRCT"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"ALGMANIP" -> {"PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "STAGG-"}*/
/*"ALGMANIP" -> {"ELAGG-"; "URAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ALGMANIP" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"ALGMANIP" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "PATAB"; "BOOLEAN"}*/
"ALGMANIP" -> "FS"
/*"ALGMANIP" -> {"FPATMAB"; "GROUP"; "RADCAT"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"ALGMANIP" -> {"GCDDOM-"; "NNI"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"}*/
/*"ALGMANIP" -> {"ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"; "INS"}*/
/*"ALGMANIP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ALGMANIP" -> {"OASGP"; "CFCAT"; "REAL"}*/

"ALGMFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ALGMFACT"]
/*"ALGMFACT" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"}*/
/*"ALGMFACT" -> {"OCAMON"; "OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"ALGMFACT" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "SGROUP"}*/
/*"ALGMFACT" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"ALGMFACT" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"ALGMFACT" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"ALGMFACT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"ALGMFACT" -> {"GCDDOM"; "PFECAT"; "UFD"; "ES"}*/

```

```

"ALGMFACT" -> "ACF"
/*"ALGMFACT" -> {"FIELD"; "EUCDOM"; "PID"; "DIVRING"; "RADCAT"; "UPOLYC"}*/
/*"ALGMFACT" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "REAL"}*/

"ALGPKG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ALGPKG"]
/*"ALGPKG" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ALGPKG" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ALGPKG" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ALGPKG" -> {"MODULE"; "ENTIRER"}*/
"ALGPKG" -> "FRNAALG"
/*"ALGPKG" -> {"FINAALG"; "NAALG"; "NARNG"; "MONAD"; "PI"; "NNI"; "INT"}*/
/*"ALGPKG" -> {"SINT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT"; "A1AGG"}*/
/*"ALGPKG" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"ALGPKG" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"ALGPKG" -> {"VECTCAT-"; "A1AGG-"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"}*/
/*"ALGPKG" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ALGPKG" -> {"OASGP"; "DIFRING"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"ALGPKG" -> {"REAL"; "CHARZ"; "STEP"; "OM"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"ALGPKG" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "BOOLEAN"; "LIST"}*/
/*"ALGPKG" -> "ILIST"*/

"ALGSC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ALGSC"]
"ALGSC" -> "FRNAALG"
/*"ALGSC" -> {"FINAALG"; "NAALG"; "NARNG"; "ABELGRP"; "CABMON"}*/
/*"ALGSC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"}*/
/*"ALGSC" -> {"MODULE"; "BMODULE"; "LMODULE"; "RMODULE"; "FIELD"; "EUCDOM"}*/
/*"ALGSC" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "SGROUP"}*/
/*"ALGSC" -> {"MONOID"; "ALGEBRA"; "ENTIRER"; "UFD"; "DIVRING"; "SMATCAT"}*/
/*"ALGSC" -> {"DIFEXT"; "DIFRING"; "PDRING"; "RMTATCAT"; "HOAGG"; "AGG"}*/
/*"ALGSC" -> {"TYPE"; "EVALAB"; "IEVALAB"; "FRETRCT"; "RETRACT"; "FLINEXP"}*/
/*"ALGSC" -> {"LINEXP"; "INT"; "VECTOR"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"ALGSC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "KONVERT"}*/
/*"ALGSC" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"; "IVECTOR"}*/
/*"ALGSC" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"}*/
/*"ALGSC" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"ALGSC" -> {"BASTYPE-"; "SINT"; "PI"; "NNI"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"ALGSC" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "LIST"; "ILIST"}*/
/*"ALGSC" -> {"LSAGG-"; "STAGG-"; "SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"}*/
/*"ALGSC" -> {"OUTFORM"; "PRIMARR"; "ISTRING"; "SRAGG-"; "LSAGG"; "STAGG"}*/
/*"ALGSC" -> {"URAGG"; "RCAGG"; "ELAGG"; "BOOLEAN"; "POLYCAT"; "FAMR"}*/
/*"ALGSC" -> {"AMR"; "CHARNZ"; "PFECAT"}*/

"AN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=AN"]
/*"AN" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"AN" -> {"IEVALAB"; "EVALAB"}*/
"AN" -> "ACF"
/*"AN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"AN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"AN" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"AN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"AN" -> {"LINEXP"; "REAL"; "KONVERT"; "CHARZ"; "DIFRING"; "INS"}*/
/*"AN" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"AN" -> {"PATMAB"; "CFCAT"; "STEP"; "QFCAT"; "FEVALAB"; "ELTAB"}*/
/*"AN" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"}*/

```

```

/*"AN" -> {"CHARNZ"; "PFECAT"; "FPS"; "RNS"; "CACHSET"}*/

"APPRULE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=APPRULE"]
/*"APPRULE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"; "ABELGRP"}*/
/*"APPRULE" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"APPRULE" -> {"PATMAB"; "ORDSET"; "KONVERT"}*/
"APPRULE" -> "FS"
/*"APPRULE" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"}*/
/*"APPRULE" -> {"TYPE"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"APPRULE" -> {"CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"}*/
/*"APPRULE" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"APPRULE" -> {"ENTIRER"; "UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "PI"}*/
/*"APPRULE" -> {"NNI"; "SINT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"APPRULE" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"APPRULE" -> {"FLAGG"; "ELAGG"; "OM"; "INS-"}*/

"ASP19" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP19"]
/*"ASP19" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"}*/
/*"ASP19" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"ASP19" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"ASP19" -> {"LNAGG-"; "ILIST"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"ASP19" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ASP19" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"ASP19" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ASP19" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"ASP19" -> {"OAGROUP"; "OCAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"ASP19" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
"ASP19" -> "FS"
/*"ASP19" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"ASP19" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "VECTCAT"}*/
/*"ASP19" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"}*/
/*"ASP19" -> {"ELTAB"; "CLAGG"; "INS"; "OINTDOM"; "DIFRING"; "CFCAT"}*/
/*"ASP19" -> {"STEP"; "FMTC"; "NNI"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"ASP19" -> {"VECTCAT-"; "IXAGG-"; "OM"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"ASP19" -> {"RCAGG"; "ELAGG"; "LSAGG-"; "PI"; "POLYCAT"; "FAMR"}*/
/*"ASP19" -> {"AMR"; "PFECAT"}*/

"ASP20" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP20"]
/*"ASP20" -> {"FMFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "FPS"}*/
/*"ASP20" -> {"RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ASP20" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ASP20" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP20" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"ASP20" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ASP20" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"ASP20" -> {"CHARZ"; "ES"; "IEVALAB"; "EVALAB"; "SINT"; "PI"; "NNI"}*/
/*"ASP20" -> {"INT"; "SYMBOL"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"ASP20" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"ASP20" -> {"LNAGG-"; "FMTC"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP20" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP20" -> {"FRETRCT"; "FLINEXP"; "PFECAT"; "QFCAT"; "FEVALAB"; "ELTAB"}*/
/*"ASP20" -> {"DIFEXT"; "PATAB"; "FPATMAB"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"ASP20" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/
"ASP20" -> "FS"

```

```

/*"ASP20" -> "GROUP"*/

"ASP31" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP31"]
/*"ASP31" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"}*/
/*"ASP31" -> {"REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"ASP31" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"ASP31" -> {"BOOLEAN"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"ASP31" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ASP31" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"}*/
/*"ASP31" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ASP31" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ASP31" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"ASP31" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/
"ASP31" -> "FS"
/*"ASP31" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"ASP31" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "VECTCAT"}*/
/*"ASP31" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"}*/
/*"ASP31" -> {"ELTAB"; "CLAGG"; "NNI"; "ILIST"; "VECTOR"; "IVECTOR"}*/
/*"ASP31" -> {"IARRAY1"; "INS"; "OINTDOM"; "DIFRING"; "CFCAT"; "STEP"}*/
/*"ASP31" -> {"OM"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "FMTC"}*/
/*"ASP31" -> {"POLYCAT"; "FAMR"; "AMR"; "PFECAT"}*/

"ASP35" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP35"]
/*"ASP35" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "SINT"}*/
/*"ASP35" -> {"NNI"; "INT"; "SYMBOL"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"ASP35" -> {"CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"ASP35" -> {"FLAGG-"; "LNAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"ASP35" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ASP35" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"}*/
/*"ASP35" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ASP35" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"ASP35" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"ASP35" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
"ASP35" -> "FS"
/*"ASP35" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"ASP35" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "VECTCAT"}*/
/*"ASP35" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"}*/
/*"ASP35" -> {"ELTAB"; "CLAGG"; "INS"; "OINTDOM"; "DIFRING"; "CFCAT"}*/
/*"ASP35" -> {"STEP"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "LSAGG"}*/
/*"ASP35" -> {"STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "FMTC"; "POLYCAT"}*/
/*"ASP35" -> {"FAMR"; "AMR"; "PFECAT"}*/

"ASP41" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP41"]
/*"ASP41" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"}*/
/*"ASP41" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"ASP41" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"ASP41" -> {"LNAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"ASP41" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ASP41" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"}*/
/*"ASP41" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ASP41" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ASP41" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"ASP41" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/
"ASP41" -> "FS"

```

```

/*"ASP41" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"ASP41" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "VECTCAT"}*/
/*"ASP41" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"ASP41" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"ASP41" -> {"VECTCAT-"; "IXAGG-"; "NNI"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"ASP41" -> {"CFCAT"; "STEP"; "OM"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ASP41" -> {"ELAGG"; "FMTC"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"}*/

"ASP42" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP42"]
/*"ASP42" -> {"FVFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "BOOLEAN"; "SYMBOL"}*/
/*"ASP42" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"ASP42" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"ASP42" -> {"FLAGG-"; "LNAGG-"; "NNI"; "ILIST"; "FPS"; "RNS"; "FIELD"}*/
/*"ASP42" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ASP42" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ASP42" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"ASP42" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"ASP42" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ASP42" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
"ASP42" -> "FS"
/*"ASP42" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"ASP42" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "VECTCAT"}*/
/*"ASP42" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"}*/
/*"ASP42" -> {"ELTAB"; "CLAGG"; "INS"; "OINTDOM"; "DIFRING"; "CFCAT"}*/
/*"ASP42" -> {"STEP"; "OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "LSAGG"}*/
/*"ASP42" -> {"STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "VECTCAT-"; "IXAGG-"}*/
/*"ASP42" -> {"FMTC"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"}*/

"ASP74" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP74"]
/*"ASP74" -> {"FMFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "FPS"; "RNS"; "FIELD"}*/
/*"ASP74" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ASP74" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ASP74" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ASP74" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"ASP74" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"ASP74" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "ES"}*/
/*"ASP74" -> {"IEVALAB"; "EVALAB"; "NNI"; "INT"; "INS"; "OINTDOM"}*/
/*"ASP74" -> {"DIFRING"; "FLINEXP"; "CFCAT"; "STEP"; "OM"; "PI"; "FMTC"}*/
/*"ASP74" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"ASP74" -> {"FLINEXP"; "PFECAT"; "QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/*"ASP74" -> {"PATAB"; "FPATMAB"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"ASP74" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/
"ASP74" -> "FS"
/*"ASP74" -> "GROUP"*/

"ASP77" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP77"]
/*"ASP77" -> {"FMFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"ASP77" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ASP77" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ASP77" -> {"SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ASP77" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ASP77" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ASP77" -> {"OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"ASP77" -> {"RADCAT"; "PATMAB"; "CHARZ"}*/

```

```

"ASP77" -> "FS"
/*"ASP77" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"ASP77" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "VECTCAT"}*/
/*"ASP77" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"ASP77" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"ASP77" -> {"CFCAT"; "STEP"; "BOOLEAN"; "FMTC"; "POLYCAT"; "FAMR"}*/
/*"ASP77" -> {"AMR"; "PFECAT"; "QFCAT"; "FEVALAB"; "DIFEXT"}*/

"ASP80" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ASP80"]
/*"ASP80" -> {"FMFUN"; "FORTCAT"; "TYPE"; "KOERCE"; "SYMBOL"; "INT"}*/
/*"ASP80" -> {"REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"ASP80" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"ASP80" -> {"BOOLEAN"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"ASP80" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ASP80" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "SGROUP"; "MONOID"}*/
/*"ASP80" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ASP80" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ASP80" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"ASP80" -> {"RADCAT"; "PATMAB"; "CHARZ"; "FMTC"; "ES"; "IEVALAB"}*/
/*"ASP80" -> {"EVALAB"; "PI"; "NNI"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ASP80" -> {"CFCAT"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"ASP80" -> {"FRETRCT"; "FLINEXP"; "PFECAT"; "QFCAT"; "FEVALAB"; "ELTAB"}*/
/*"ASP80" -> {"DIFEXT"; "PATAB"; "FPATMAB"; "VECTCAT"; "A1AGG"; "FLAGG"}*/
/*"ASP80" -> {"LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/
"ASP80" -> "FS"
/*"ASP80" -> "GROUP"*/

"CDFMAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CDFMAT"]
"CDFMAT" -> "COMPCAT"
/*"CDFMAT" -> {"MATCAT"; "ARR2CAT"; "HOAGG"; "AGG"; "TYPE"; "SETCAT"}*/
/*"CDFMAT" -> {"BASTYPE"; "KOERCE"; "EVALAB"; "IEVALAB"; "FPS"; "RNS"}*/
/*"CDFMAT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"CDFMAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"CDFMAT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"CDFMAT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"CDFMAT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"CDFMAT" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "MONOGEN"}*/
/*"CDFMAT" -> {"FRAMALG"; "FINRNLG"; "CHARNZ"; "FRETRCT"; "FLINEXP"}*/
/*"CDFMAT" -> {"LINEXP"; "FINITE"; "DIFEXT"; "DIFRING"; "PDRING"; "FFIELDC"}*/
/*"CDFMAT" -> {"FPC"; "STEP"; "FEVALAB"; "ELTAB"; "FPATMAB"; "PATAB"}*/
/*"CDFMAT" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"CDFMAT" -> {"PFECAT"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"CDFMAT" -> {"ELTAGG"; "CLAGG"; "INT"; "SINT"; "NNI"; "OM"; "SPFCAT"}*/

"CDFVEC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CDFVEC"]
"CDFVEC" -> "COMPCAT"
/*"CDFVEC" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"CDFVEC" -> {"AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"CDFVEC" -> {"IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"}*/
/*"CDFVEC" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"CDFVEC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"CDFVEC" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"CDFVEC" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"CDFVEC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RETRACT"}*/

```

```

/*"CDFVEC" -> {"RADCAT"; "PATMAB"; "CHARZ"; "INT"; "SINT"; "NNI"; "MONOGEN"}*/
/*"CDFVEC" -> {"FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRACT"; "FLINEXP"}*/
/*"CDFVEC" -> {"LINEXP"; "FINITE"; "DIFEXT"; "DIFRING"; "PDRING"; "FFIELDC"}*/
/*"CDFVEC" -> {"FPC"; "STEP"; "FEVALAB"; "FPATMAB"; "PATAB"; "TRANFUN"}*/
/*"CDFVEC" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PFECAT"}*/
/*"CDFVEC" -> {"OM"; "SPFCAT"; "INS"; "OINTDOM"; "CFCAT"}*/

"CELL" [color="#88FF44",href="bookvol10.3.pdf#nameddest=CELL"]
"CELL" -> "SCCELL"
/* "CELL" -> {"KOERCE"; "RCFIELD"; "CHARZ"; "RING"; "RNG"} */
/* "CELL" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"} */
/* "CELL" -> {"BASTYPE"; "SGROUP"; "MONOID"; "LMODULE"; "ORDRING"} */
/* "CELL" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"} */
/* "CELL" -> {"COMRING"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"} */
/* "CELL" -> {"PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"; "MODULE"} */
/* "CELL" -> {"ENTIRER"; "LORER"; "UFD"; "DIVRING"; "FRETRACT"} */
/* "CELL" -> {"RETRACT"; "RADCAT"; "INT"; "LIST"; "ILIST"} */
/* "CELL" -> {"NNI"; "SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"} */
/* "CELL" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"} */
/* "CELL" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"} */

"CINTSLPE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CINTSLPE"]
/*"CINTSLPE" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"CINTSLPE" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"CINTSLPE" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CINTSLPE" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"CINTSLPE" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"CINTSLPE" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"CINTSLPE" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/*"CINTSLPE" -> {"REAL"; "CHARZ"; "STEP"}*/
"CINTSLPE" -> "COMPCAT"
/*"CINTSLPE" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRACT"}*/
/*"CINTSLPE" -> {"FLINEXP"; "FINITE"; "FIELD"; "DIVRING"; "DIFEXT"}*/
/*"CINTSLPE" -> {"PDRING"; "FFIELDC"; "FPC"; "FEVALAB"; "ELTAB"}*/
/*"CINTSLPE" -> {"EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"; "PATAB"}*/
/*"CINTSLPE" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"CINTSLPE" -> {"ELEMFUN"; "RADCAT"; "PFECAT"; "INT"; "VECTOR"}*/
/*"CINTSLPE" -> {"IVECTOR"; "IARRAY1"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"CINTSLPE" -> {"AMR"; "LIST"; "ILIST"; "NNI"; "BOOLEAN"}*/

"COMBF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMBF"]
/*"COMBF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"COMBF" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"COMBF" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"COMBF" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
"COMBF" -> "FS"
/*"COMBF" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"COMBF" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRACT"; "GROUP"; "PDRING"}*/
/*"COMBF" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"COMBF" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "SYMBOL"; "INT"; "REF"}*/
/*"COMBF" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"COMBF" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"COMBF" -> {"BOOLEAN"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"COMBF" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/

```

```

/*"COMBF" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"COMBF" -> {"ELAGG-"; "URAGG-"; "CACHSET"; "RADCAT"; "INS"; "OINTDOM"}*/
/*"COMBF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"COMBF" -> {"CFCAT"; "REAL"; "STEP"; "INS-"; "ELEMFUN"}*/

"COMPFAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMPFAC"]
/*"COMPFAC" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"COMPFAC" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"COMPFAC" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"COMPFAC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"COMPFAC" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"COMPFAC" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"COMPFAC" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"COMPFAC" -> {"PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"COMPFAC" -> {"FIELD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"COMPFAC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"COMPFAC" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
"COMPFAC" -> "COMPCAT"
/*"COMPFAC" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"}*/
/*"COMPFAC" -> {"FPC"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"COMPFAC" -> {"ELEMFUN"; "RADCAT"; "INT"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"COMPFAC" -> {"GCDDOM-"; "SINT"; "NNI"; "OM"; "LIST"}*/

"COMPLEX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=COMPLEX"]
"COMPLEX" -> "COMPCAT"
/*"COMPLEX" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "ALGEBRA"; "RING"; "RNG"}*/
/*"COMPLEX" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"COMPLEX" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"COMPLEX" -> {"MODULE"; "BMODULE"; "RMODULE"; "CHARZ"; "CHARNZ"}*/
/*"COMPLEX" -> {"COMRING"; "KONVERT"; "FRETRCT"; "RETRACT"; "FLINEXP"}*/
/*"COMPLEX" -> {"LINEXP"; "FINITE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"COMPLEX" -> {"INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"}*/
/*"COMPLEX" -> {"DIFRING"; "PDRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"}*/
/*"COMPLEX" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"; "PATMAB"}*/
/*"COMPLEX" -> {"PATAB"; "ORDSET"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"COMPLEX" -> {"AHYP"; "ELEMFUN"; "RADCAT"; "PFECAT"; "OM"; "BOOLEAN"}*/
/*"COMPLEX" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "INS"; "OINTDOM"}*/
/*"COMPLEX" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"COMPLEX" -> {"CFCAT"; "REAL"; "RNS"; "FPS"; "OAMONS"}*/

"COMPLPAT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=COMPLPAT"]
/*"COMPLPAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "KONVERT"; "COMRING"}*/
/*"COMPLPAT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"COMPLPAT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"COMPLPAT" -> "COMPCAT"
/*"COMPLPAT" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "ALGEBRA"; "MODULE"}*/
/*"COMPLPAT" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "FLINEXP"}*/
/*"COMPLPAT" -> {"LINEXP"; "FINITE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"COMPLPAT" -> {"INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"; "DIFRING"}*/
/*"COMPLPAT" -> {"PDRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"}*/
/*"COMPLPAT" -> {"EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"; "PATMAB"; "PATAB"}*/
/*"COMPLPAT" -> {"ORDSET"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"COMPLPAT" -> {"ELEMFUN"; "RADCAT"; "PFECAT"; "SYMBOL"; "INT"; "REF"}*/
/*"COMPLPAT" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/

```



```

/*"COMPLPAT" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"COMPLPAT" -> {"LNAGG-"; "BOOLEAN"}*/

"CMPLXRT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CMPLXRT"]
/*"CMPLXRT" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"CMPLXRT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"CMPLXRT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"}*/
/*"CMPLXRT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"CMPLXRT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"CMPLXRT" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"CMPLXRT" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"}*/
/*"CMPLXRT" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"; "PID"}*/
/*"CMPLXRT" -> {"FIELD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"CMPLXRT" -> {"OAMON"; "OASGP"; "SYMBOL"; "INT"; "REF"; "ALIST"}*/
/*"CMPLXRT" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"CMPLXRT" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"CMPLXRT" -> {"INS"; "OINTDOM"; "CFCAT"; "REAL"; "ILIST"}*/
"CMPLXRT" -> "COMPCAT"
/*"CMPLXRT" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"}*/
/*"CMPLXRT" -> {"FPC"; "FEVALAB"; "FPATMAB"; "TYPE"; "PATAB"; "TRANFUN"}*/
/*"CMPLXRT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"}*/
/*"CMPLXRT" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/

"CPMATCH" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CPMATCH"]
/*"CPMATCH" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "PATMAB"; "COMRING"; "RING"}*/
/*"CPMATCH" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"CPMATCH" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"CPMATCH" -> "COMPCAT"
/*"CPMATCH" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "ALGEBRA"; "MODULE"}*/
/*"CPMATCH" -> {"CHARZ"; "CHARNZ"; "KONVERT"; "FRETRCT"; "RETRACT"}*/
/*"CPMATCH" -> {"FLINEXP"; "LINEXP"; "FINITE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"CPMATCH" -> {"GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"}*/
/*"CPMATCH" -> {"DIFRING"; "PDRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"}*/
/*"CPMATCH" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"; "PATAB"}*/
/*"CPMATCH" -> {"ORDSET"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"CPMATCH" -> {"ELEMFUN"; "RADCAT"; "PFECAT"; "SYMBOL"; "INT"; "REF"}*/
/*"CPMATCH" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"CPMATCH" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"CPMATCH" -> {"LNAGG-"; "NNI"; "POLYCAT"; "FAMR"; "AMR"}*/

"CRFP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CRFP"]
/*"CRFP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"CRFP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"CRFP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"CRFP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"CRFP" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"CRFP" -> {"ORDSET"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"CRFP" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"CRFP" -> {"FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"}*/
/*"CRFP" -> {"DIFRING"; "DIFEXT"; "STEP"}*/
"CRFP" -> "COMPCAT"
/*"CRFP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"CRFP" -> {"FEVALAB"; "FPATMAB"; "TYPE"; "PATAB"; "TRANFUN"; "TRIGCAT"}*/
/*"CRFP" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"; "INT"; "NNI"}*/

```

```

/*"CRFP" -> {"QFCAT"; "OINTDOM"; "REAL"; "PI"; "OM"; "BOOLEAN"; "LSAGG"}*/
/*"CRFP" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"CRFP" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"CRFP" -> {"SINT"; "INS"; "CFCAT"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"CRFP" -> {"LNAGG-"; "MONOID-"; "ABELMON-"; "RNS"}*/

"CTRIGMNP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CTRIGMNP"]
/*"CTRIGMNP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"CTRIGMNP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"CTRIGMNP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"CTRIGMNP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"}*/
"CTRIGMNP" -> "ACF"
/*"CTRIGMNP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"CTRIGMNP" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"CTRIGMNP" -> {"AHYP"; "ELEMFUN"}*/
"CTRIGMNP" -> "FS"
/*"CTRIGMNP" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"CTRIGMNP" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"CTRIGMNP" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"CTRIGMNP" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"CTRIGMNP" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"CTRIGMNP" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"CTRIGMNP" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
"CTRIGMNP" -> "COMPCAT"
/*"CTRIGMNP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "DIFEXT"}*/
/*"CTRIGMNP" -> {"DIFRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "PFECAT"}*/
/*"CTRIGMNP" -> {"CACHSET"; "BOOLEAN"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"CTRIGMNP" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"CTRIGMNP" -> "SRAGG-*/

"D01WGTS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=D01WGTS"]
/*"D01WGTS" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"D01WGTS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"D01WGTS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"D01WGTS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"D01WGTS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"D01WGTS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"D01WGTS" -> {"ORDSET"; "REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"}*/
/*"D01WGTS" -> "CHARZ"*/
"D01WGTS" -> "FS"
/*"D01WGTS" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"D01WGTS" -> {"FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"}*/
/*"D01WGTS" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"D01WGTS" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"D01WGTS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"D01WGTS" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"D01WGTS" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ILIST"; "NNI"}*/
/*"D01WGTS" -> {"LSAGG-"; "STAGG-"; "BOOLEAN"; "DIFRING"; "TRANFUN"}*/
/*"D01WGTS" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"}*/
/*"D01WGTS" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "INS"}*/
/*"D01WGTS" -> {"OINTDOM"; "CFCAT"; "STEP"; "DFLOAT"; "FPS-"; "RNS-"}*/

"D02AGNT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=D02AGNT"]
/*"D02AGNT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/

```

```

/*"D02AGNT" -> {"TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"; "EVALAB"}*/
/*"D02AGNT" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"D02AGNT" -> {"KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"; "INT"}*/
/*"D02AGNT" -> {"LIST"; "ILIST"; "DFLOAT"; "NNI"; "PI"; "FPS"; "RNS"}*/
/*"D02AGNT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"D02AGNT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"D02AGNT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"D02AGNT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"D02AGNT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "RETRACT"}*/
/*"D02AGNT" -> {"RADCAT"; "PATMAB"; "CHARZ"; "VECTCAT"; "A1AGG"; "VECTOR"}*/
/*"D02AGNT" -> {"IVECTOR"; "IARRAY1"; "DIFRING"; "TRANFUN"; "TRIGCAT"}*/
/*"D02AGNT" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "VECTCAT-"}*/
/*"D02AGNT" -> {"A1AGG-"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "BOOLEAN"}*/
"D02AGNT" -> "FS"
/*"D02AGNT" -> {"ES"; "PATAB"; "FPATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"D02AGNT" -> {"FLINEXP"; "LINEXP"; "CHARNZ"; "MATCAT"; "ARR2CAT"}*/
/*"D02AGNT" -> {"INS"; "OINTDOM"; "CFCAT"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"D02AGNT" -> {"DIFEXT"; "PFECAT"; "LNAGG-"; "IXAGG-"; "SINT"; "SYMBOL"}*/
/*"D02AGNT" -> {"REF"; "ALIST"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"D02AGNT" -> {"PRIMARR"; "ISTRING"; "SRAGG-"}*/

"D03EEFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D03EEFA"]
/*"D03EEFA" -> {"PDECAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "LSAGG"}*/
/*"D03EEFA" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"D03EEFA" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"D03EEFA" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"}*/
/*"D03EEFA" -> {"OM"; "INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"D03EEFA" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "PI"; "MONOID-"; "ABELMON-"}*/
/*"D03EEFA" -> {"DFLOAT"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"D03EEFA" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"D03EEFA" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"D03EEFA" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"D03EEFA" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"D03EEFA" -> {"OAMON"; "OASGP"; "REAL"; "RETRACT"; "RADCAT"}*/
/*"D03EEFA" -> {"PATMAB"; "CHARZ"; "VECTOR"}*/
"D03EEFA" -> "FS"
/*"D03EEFA" -> {"ES"; "PATAB"; "FPATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"D03EEFA" -> {"FLINEXP"; "LINEXP"; "CHARNZ"}*/

"DBLRESP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DBLRESP"]
/*"DBLRESP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"DBLRESP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"DBLRESP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"DBLRESP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"DBLRESP" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"}*/
/*"DBLRESP" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"DBLRESP" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"DBLRESP" -> {"ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"}*/
/*"DBLRESP" -> {"DIFRING"; "DIFEXT"; "STEP"}*/
"DBLRESP" -> "FFCAT"
/*"DBLRESP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"}*/
/*"DBLRESP" -> {"FPC"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"DBLRESP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"DBLRESP" -> {"OASGP"; "REAL"; "NNI"; "INT"; "PI"}*/

```

```

"D01AGNT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=D01AGNT"]
/*"D01AGNT" -> {"INT"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"D01AGNT" -> {"HOAGG"; "AGG"; "TYPE"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"D01AGNT" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"D01AGNT" -> {"CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/
/*"D01AGNT" -> {"NNI"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"D01AGNT" -> {"A1AGG-"; "ISTRING"; "LSAGG-"; "STAGG-"; "FPS"; "RNS"}*/
/*"D01AGNT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"D01AGNT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"D01AGNT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"D01AGNT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"D01AGNT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"D01AGNT" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "DFLOAT"; "DIFRING"}*/
/*"D01AGNT" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"D01AGNT" -> {"ELEMFUN"; "SPFCAT"; "ELAGG-"; "FLAGG-"}*/
"D01AGNT" -> "FS"
/*"D01AGNT" -> {"ES"; "PATAB"; "FPATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"D01AGNT" -> {"FLINEXP"; "LINEXP"; "CHARNZ"; "INS"; "OINTDOM"; "CFCAT"}*/
/*"D01AGNT" -> {"STEP"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PFECAT"; "BOOLEAN"}*/

"DERHAM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=DERHAM"]
/*"DERHAM" -> {"LALG"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"DERHAM" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"DERHAM" -> {"MONOID"; "LMODULE"; "RETRACT"}*/
"DERHAM" -> "FS"
/*"DERHAM" -> {"ES"; "ORDSET"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"DERHAM" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"DERHAM" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"}*/
/*"DERHAM" -> {"BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DERHAM" -> {"INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"; "LSAGG"}*/
/*"DERHAM" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"DERHAM" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"DERHAM" -> {"LIST"; "ILIST"; "SINT"; "NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"DERHAM" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"DERHAM" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"DERHAM" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"DERHAM" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/

"DFSFUN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DFSFUN"]
/*"DFSFUN" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DFSFUN" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DFSFUN" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DFSFUN" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DFSFUN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"DFSFUN" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"DFSFUN" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "DFLOAT"}*/
/*"DFSFUN" -> {"NNI"; "INT"; "PI"; "FPS-"; "RNS-"; "FIELD-"; "EUCDOM-"}*/
/*"DFSFUN" -> {"UFD-"; "GCDDOM-"; "DIVRING-"; "INTDOM-"; "ALGEBRA-"}*/
/*"DFSFUN" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"DFSFUN" -> {"ABELMON-"; "MONOID-"; "ORDSET-"; "ABELSG-"; "SGROUP-"}*/
/*"DFSFUN" -> {"INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/
/*"DFSFUN" -> {"OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"DFSFUN" -> {"ELEMFUN"; "SPFCAT"}*/

```

```

"DFSFUN" -> "COMPCAT"
/*"DFSFUN" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"DFSFUN" -> {"FLINEXP"; "FINITE"; "DIFEXT"; "PDRING"; "FFIELDC"}*/
/*"DFSFUN" -> {"FPC"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"}*/
/*"DFSFUN" -> {"TYPE"; "PATAB"; "PFECAT"; "FRAC"}*/

"DRAWCURV" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DRAWCURV"]
/*"DRAWCURV" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DRAWCURV" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"DRAWCURV" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"DRAWCURV" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"}*/
"DRAWCURV" -> "FS"
/*"DRAWCURV" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"DRAWCURV" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"DRAWCURV" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"DRAWCURV" -> {"GCDDOM"; "UFD"; "DIVRING"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"DRAWCURV" -> {"PFECAT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"DRAWCURV" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "CFCAT"; "REAL"}*/
/*"DRAWCURV" -> {"STEP"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"DRAWCURV" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"DRAWCURV" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"DRAWCURV" -> {"ELAGG-"; "URAGG-"; "OM"; "FPS"; "RNS"; "RADCAT"}*/

"DTP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DTP"]
"DTP" -> "INFCLCT"
/*"DTP" -> {"PRSPCAT"; "SETCATD"; "LOCPOWC"; "PLACESC"; "DIVCAT"; "DSTRCAT"}*/
/*"DTP" -> {"BLMETCT"; "PFORP"; "AFFPL"; "PARAMP"; "PLPKCRV"; "BLUPPACK"}*/
/*"DTP" -> {"LPARSPT"; "DIV"; "PRJALGPK"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"DTP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"DTP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"DTP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"DTP" -> {"ENTIRER"; "UFD"; "DIVRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"DTP" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"DTP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"DTP" -> {"DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"; "ELTAB"}*/
/*"DTP" -> {"DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DTP" -> {"OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "UPSCAT"; "PSCAT"}*/
/*"DTP" -> {"FAMONC"; "RCAGG"; "INT"; "PI"; "NNI"; "SINT"; "BOOLEAN"; "LIST"}*/
/*"DTP" -> {"ILIST"; "LSAGG-"; "STAGG-"; "VECTOR"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"DTP" -> {"LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "SYMBOL"; "REF"}*/
/*"DTP" -> {"ALIST"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"DTP" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"D01TRNS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=D01TRNS"]
/*"D01TRNS" -> {"NUMINT"; "SETCAT"; "BASTYPE"; "KOERCE"; "STRING"; "CHAR"}*/
/*"D01TRNS" -> {"SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"; "A1AGG-"}*/
/*"D01TRNS" -> {"ISTRING"; "SRAGG-"; "SYMBOL"; "REF"; "ALIST"; "FLAGG-"}*/
/*"D01TRNS" -> {"LNAGG-"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"D01TRNS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"D01TRNS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"D01TRNS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"D01TRNS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"D01TRNS" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"}*/
/*"D01TRNS" -> {"PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "QFCAT"}*/

```

```

/*"D01TRNS" -> {"FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"D01TRNS" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"}*/
/*"D01TRNS" -> {"FPATMAB"; "TYPE"; "CHARNZ"; "PFECAT"; "OM"; "FPS"}*/
/*"D01TRNS" -> {"RNS"; "RADCAT"}*/
"D01TRNS" -> "FS"
/*"D01TRNS" -> {"ES"; "FRETRCT"; "GROUP"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"D01TRNS" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "DFLOAT"; "PI"}*/
/*"D01TRNS" -> {"NNI"; "BOOLEAN"; "ILIST"}*/

"E04NAFA" [color="#88FF44",href="bookvol10.3.pdf#nameddest=E04NAFA"]
/*"E04NAFA" -> {"OPTCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "FPS"; "RNS"}*/
/*"E04NAFA" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"E04NAFA" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"E04NAFA" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"E04NAFA" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"E04NAFA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"E04NAFA" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "STRING"}*/
/*"E04NAFA" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"E04NAFA" -> {"A1AGG-"; "ISTRING"; "STRICAT"; "SRAGG"; "A1AGG"}*/
/*"E04NAFA" -> {"FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"E04NAFA" -> {"EVALAB"; "IEVALAB"; "ELTAGG"; "ELTAB"; "CLAGG"; "OM"}*/
/*"E04NAFA" -> {"NNI"; "DIFRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"E04NAFA" -> {"AHYP"; "ELEMFUN"; "SPFCAT"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"E04NAFA" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "ELAGG-"}*/
/*"E04NAFA" -> {"FLAGG-"; "DFLOAT"; "PI"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"E04NAFA" -> {"AMR"; "CHARNZ"; "FRETRCT"; "FLINEXP"; "LINEXP"; "PFECAT"}*/
/*"E04NAFA" -> "VECTCAT"*/
"E04NAFA" -> "FS"
/*"E04NAFA" -> {"ES"; "PATAB"; "FPATMAB"; "GROUP"; "INS-"; "INS"}*/
/*"E04NAFA" -> {"OINTDOM"; "CFCAT"; "STEP"; "MONOID-"; "ABELMON-"; "BOOLEAN"}*/

"EF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EF"]
/*"EF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"}*/
/*"EF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"EF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"EF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"}*/
"EF" -> "FS"
/*"EF" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"EF" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"EF" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"EF" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "RADCAT"; "SYMBOL"; "INT"}*/
/*"EF" -> {"REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"EF" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"EF" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"EF" -> {"ILIST"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"EF" -> {"OAMON"; "OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"; "OM"}*/
/*"EF" -> {"INS-"; "LSAGG-"; "STAGG-"; "PI"; "NNI"; "BOOLEAN"; "CACHSET"}*/

"EFSTRUC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EFSTRUC"]
/*"EFSTRUC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"EFSTRUC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"EFSTRUC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"EFSTRUC" -> {"MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"; "LINEXP"}*/
"EFSTRUC" -> "ACF"

```

```

/*"EFSTRUC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"EFSTRUC" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"EFSTRUC" -> {"AHYP"; "ELEMFUN"}*/
"EFSTRUC" -> "FS"
/*"EFSTRUC" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"EFSTRUC" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"EFSTRUC" -> {"CHARZ"; "CHARNZ"; "COMBOPC"; "CFCAT"; "CACHSET"; "BOOLEAN"}*/
/*"EFSTRUC" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"EFSTRUC" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"EFSTRUC" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "INS"}*/
/*"EFSTRUC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"EFSTRUC" -> {"DIFRING"; "REAL"; "STEP"; "PI"; "NNI"; "SINT"; "SYMBOL"}*/
/*"EFSTRUC" -> {"REF"; "ALIST"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"}*/
/*"EFSTRUC" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "URAGG-"}*/
/*"EFSTRUC" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"EFSTRUC" -> {"VECTCAT"; "A1AGG"; "VECTCAT-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"EFSTRUC" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/

"ELFUTS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ELFUTS"]
/*"ELFUTS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ELFUTS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ELFUTS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ELFUTS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ELFUTS" -> {"ENTIRER"; "UFD"; "DIVRING"}*/
"ELFUTS" -> "UTSCAT"
/*"ELFUTS" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"}*/
/*"ELFUTS" -> {"DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"ELFUTS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "INT"; "LIST"}*/
/*"ELFUTS" -> {"ILIST"; "LSAGG-"; "STAGG-"}*/

"ESTOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ESTOOLS"]
/*"ESTOOLS" -> {"INT"; "LIST"; "ILIST"; "NNI"; "FPS"; "RNS"; "FIELD"}*/
/*"ESTOOLS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"ESTOOLS" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ESTOOLS" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ESTOOLS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ESTOOLS" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ESTOOLS" -> {"OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"; "RETRACT"}*/
/*"ESTOOLS" -> {"RADCAT"; "PATMAB"; "CHARZ"; "SINT"; "LSAGG-"; "DFLOAT"}*/
/*"ESTOOLS" -> {"FPS-"; "RNS-"; "INS"; "OINTDOM"; "DIFRING"; "LINEXP"}*/
/*"ESTOOLS" -> {"CFCAT"; "STEP"; "OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"ESTOOLS" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "SPFCAT"; "QFCAT"; "FEVALAB"}*/
/*"ESTOOLS" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "PDRING"}*/
/*"ESTOOLS" -> {"FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"; "PFECAT"}*/
/*"ESTOOLS" -> {"LZSTAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"ESTOOLS" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "VECTOR"; "VECTCAT"}*/
/*"ESTOOLS" -> {"A1AGG"; "FLAGG"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"ESTOOLS" -> {"A1AGG-"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"ESTOOLS" -> {"HOAGG-"; "BOOLEAN"; "LSAGG"; "ELAGG"; "STAGG-"}*/
"ESTOOLS" -> "FS"
/*"ESTOOLS" -> {"ES"; "FRETRCT"; "GROUP"; "ELAGG-"; "URAGG-"; "RCAGG-"}*/
/*"ESTOOLS" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"ESTOOLS" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"ESTOOLS" -> {"ABELMON-"; "PI"; "TBAGG"; "KDAGG"; "DIAGG"; "DIOPS"}*/

```

```

/*"ESTOOLS" -> {"BGAGG"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "ISTRING"}*/

"EXPEXPAN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EXPEXPAN"]
"EXPEXPAN" -> "ACF"
/*"EXPEXPAN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"EXPEXPAN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"EXPEXPAN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"EXPEXPAN" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"EXPEXPAN" -> {"ENTIRER"; "UFD"; "DIVRING"; "RADCAT"; "TRANFUN"}*/
/*"EXPEXPAN" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"EXPEXPAN" -> "FS"
/*"EXPEXPAN" -> {"ES"; "ORDSET"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"EXPEXPAN" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRACT"}*/
/*"EXPEXPAN" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"}*/
/*"EXPEXPAN" -> {"QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"; "DIFRING"; "STEP"}*/
/*"EXPEXPAN" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"EXPEXPAN" -> {"OASGP"; "REAL"; "PFECAT"; "FAMR"; "AMR"; "PI"; "NNI"}*/
/*"EXPEXPAN" -> {"INT"; "INS"; "CFCAT"; "OM"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"EXPEXPAN" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"EXPEXPAN" -> {"CLAGG"; "FLAGG"; "ELAGG"; "LIST"; "ILIST"; "STRING"}*/
/*"EXPEXPAN" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"EXPEXPAN" -> {"UPXSCCA"; "UPXSCAT"; "UPSCAT"; "PSCAT"; "FPS"}*/
/*"EXPEXPAN" -> {"RNS"; "UPOLYC"; "POLYCAT"}*/

"EXPRODE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EXPRODE"]
/*"EXPRODE" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"EXPRODE" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"EXPRODE" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"EXPRODE" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "KONVERT"}*/
"EXPRODE" -> "FS"
/*"EXPRODE" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"}*/
/*"EXPRODE" -> {"TYPE"; "PATMAB"; "FRETRACT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"EXPRODE" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"EXPRODE" -> {"GCDDOM"; "UFD"; "DIVRING"; "SYMBOL"; "INT"; "REF"; "ALIST"}*/
/*"EXPRODE" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"EXPRODE" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"}*/
/*"EXPRODE" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"EXPRODE" -> {"DIFRING"; "CFCAT"; "REAL"; "STEP"; "CACHSET"; "UPOLYC"}*/
/*"EXPRODE" -> {"POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFEXT"}*/
/*"EXPRODE" -> {"NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"EXPRODE" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"EXPRODE" -> {"OM"; "ILIST"}*/

"EXPTUBE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EXPTUBE"]
/*"EXPTUBE" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"EXPTUBE" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"EXPTUBE" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"EXPTUBE" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"EXPTUBE" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"EXPTUBE" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"EXPTUBE" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"EXPTUBE" -> {"CHARZ"; "STEP"; "OM"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"EXPTUBE" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"EXPTUBE" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/

```



```

/*"EXPR2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EXPR2"]
/*"EXPR2" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RING"; "RNG"}*/
/*"EXPR2" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"EXPR2" -> {"MONOID"; "LMODULE"}*/
"EXPR2" -> "FS"
/*"EXPR2" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"EXPR2" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRACT"; "GROUP"; "PDRING"}*/
/*"EXPR2" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"}*/
/*"EXPR2" -> {"BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"EXPR2" -> {"INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"}*/

"FC" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FC"]
/*"FC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SINT"; "INS"; "UFD"; "GCDDOM"}*/
/*"FC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FC" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"FC" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"FC" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"FC" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "INT"; "LIST"; "ILIST"}*/
/*"FC" -> {"LSAGG-"; "STAGG-"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"FC" -> {"CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"FC" -> {"FLAGG-"; "LNAGG-"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"FC" -> {"FRETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"; "STRICAT"}*/
/*"FC" -> {"SRAGG"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"FC" -> {"TYPE"; "ELTAGG"; "ELTAB"; "CLAGG"; "OM"; "NNI"; "DFLOAT"}*/
/*"FC" -> {"BOOLEAN"; "FMTC"; "FPS"; "RNS"; "FIELD"; "DIVRING"; "RADCAT"}*/
"FC" -> "COMPCAT"
/*"FC" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "DIFEXT"; "FFIELDC"}*/
/*"FC" -> {"FPC"; "FEVALAB"; "FPATMAB"; "PATAB"; "TRANFUN"; "TRIGCAT"}*/
/*"FC" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "VECTOR"; "IVECTOR"}*/
/*"FC" -> {"IARRAY1"; "VECTCAT-"}*/
"FC" -> "FS"
/*"FC" -> {"ES"; "GROUP"}*/

"FDIVCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=FDIVCAT"]
/*"FDIVCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FDIVCAT" -> {"BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FDIVCAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"FDIVCAT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FDIVCAT" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"FDIVCAT" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRACT"; "RETRACT"}*/
/*"FDIVCAT" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"FDIVCAT" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"FDIVCAT" -> {"DIFEXT"; "STEP"}*/
"FDIVCAT" -> "FFCAT"
/*"FDIVCAT" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/

```

```

"FDIVCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FDIVCAT"]
/*"FDIVCAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FDIVCAT-" -> {"BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FDIVCAT-" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "SGROUP"}*/
/*"FDIVCAT-" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FDIVCAT-" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"}*/
/*"FDIVCAT-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"FDIVCAT-" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"FDIVCAT-" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"FDIVCAT-" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
"FDIVCAT-" -> "FFCAT"
/*"FDIVCAT-" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"}*/
/*"FDIVCAT-" -> "FPC"*/

"FDIV2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FDIV2"]
/*"FDIV2" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FDIV2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FDIV2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FDIV2" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"FDIV2" -> {"DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"FDIV2" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FDIV2" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"FDIV2" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
"FDIV2" -> "FFCAT"
/*"FDIV2" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/

"FFCAT2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FFCAT2"]
/*"FFCAT2" -> {"UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FFCAT2" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FFCAT2" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FFCAT2" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FFCAT2" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"FFCAT2" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"FFCAT2" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"FFCAT2" -> {"PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"FFCAT2" -> {"EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
"FFCAT2" -> "FFCAT"
/*"FFCAT2" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/

"FLOATCP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FLOATCP"]
/*"FLOATCP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"FLOATCP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FLOATCP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FLOATCP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FLOATCP" -> {"ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FLOATCP" -> {"OAMON"; "OASGP"; "ORDSET"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"FLOATCP" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFECAT"}*/
/*"FLOATCP" -> {"REAL"; "CHARZ"; "STEP"}*/
"FLOATCP" -> "COMPCAT"
/*"FLOATCP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"FLOATCP" -> {"FLINEXP"; "FINITE"; "DIFEXT"; "PDRING"; "FFIELDC"}*/
/*"FLOATCP" -> {"FPC"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"}*/
/*"FLOATCP" -> {"TYPE"; "PATAB"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/

```

```

/*"FLOATCP" -> {"AHYP"; "ELEMFUN"; "RADCAT"; "PFECAT"; "POLYCAT"; "FAMR"}*/
/*"FLOATCP" -> {"AMR"; "BOOLEAN"; "OM"; "INT"; "LIST"; "ILIST"; "QFCAT"}*/

"FORDER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FORDER"]
/*"FORDER" -> {"FINITE"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"}*/
/*"FORDER" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FORDER" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"FORDER" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FORDER" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"}*/
/*"FORDER" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"FORDER" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"FORDER" -> {"ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"}*/
/*"FORDER" -> {"DIFRING"; "DIFEXT"; "STEP"}*/
"FORDER" -> "FFCAT"
/*"FORDER" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FFIELDC"}*/
/*"FORDER" -> {"FPC"; "SINT"; "NNI"; "INT"}*/

"FORTRAN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FORTRAN"]
/*"FORTRAN" -> {"FORTCAT"; "TYPE"; "KOERCE"; "SINT"; "SYMBOL"; "INT"}*/
/*"FORTRAN" -> {"REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"FORTRAN" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"FORTRAN" -> {"LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"FORTRAN" -> {"RCAGG-"; "IXAGG-"; "ORDSET"; "SETCAT"; "BASTYPE"; "KONVERT"}*/
/*"FORTRAN" -> {"OM"; "PATMAB"; "FMTC"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"FORTRAN" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"FORTRAN" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FORTRAN" -> {"MODULE"; "ENTIRER"; "RETRACT"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"FORTRAN" -> {"RCAGG"; "HOAGG"; "AGG"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"FORTRAN" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"FORTRAN" -> {"NNI"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FORTRAN" -> {"UFD"; "DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FORTRAN" -> {"OASGP"; "REAL"; "RADCAT"; "CHARZ"; "INS"; "OINTDOM"}*/
/*"FORTRAN" -> {"DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/
"FORTRAN" -> "COMPCAT"
/*"FORTRAN" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"FORTRAN" -> {"FLINEXP"; "FINITE"; "DIFEXT"; "PDRING"; "FFIELDC"; "FPC"}*/
/*"FORTRAN" -> {"FEVALAB"; "FPATMAB"; "PATAB"; "TRANFUN"; "TRIGCAT"}*/
/*"FORTRAN" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PFECAT"}*/

"FRNAAF2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FRNAAF2"]
"FRNAAF2" -> "FRNAALG"
/*"FRNAAF2" -> {"FINAALG"; "NAALG"; "NARNG"; "ABELGRP"; "CABMON"}*/
/*"FRNAAF2" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FRNAAF2" -> {"MONAD"; "MODULE"; "BMODULE"; "LMODULE"; "RMODULE"}*/
/*"FRNAAF2" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"; "PI"}*/
/*"FRNAAF2" -> {"NNI"; "INT"; "SINT"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/

"FSPRMELT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSPRMELT"]
/*"FSPRMELT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"FSPRMELT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FSPRMELT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FSPRMELT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"FSPRMELT" -> "CHARZ"*/
"FSPRMELT" -> "FS"

```

```

/*"FSRPMELT" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"FSRPMELT" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"FSRPMELT" -> {"FLINEXP"; "LINEXP"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FSRPMELT" -> {"GCDDOM"; "UFD"; "DIVRING"; "CACHSET"; "POLYCAT"; "FAMR"}*/
/*"FSRPMELT" -> {"AMR"; "PFECAT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"FSRPMELT" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"FSRPMELT" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"}*/
/*"FSRPMELT" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "SINT"}*/
/*"FSRPMELT" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"FSRPMELT" -> {"FLAGG-"; "LNAGG-"; "NNI"; "ACF"; "RADCAT"; "BOOLEAN"}*/
/*"FSRPMELT" -> {"UPOLYC"; "DIFRING"; "DIFEXT"; "STEP"; "PI"}*/

"FSRED" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSRED"]
/*"FSRED" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"FSRED" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FSRED" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FSRED" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"}*/
"FSRED" -> "FS"
/*"FSRED" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"FSRED" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"FSRED" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FSRED" -> {"GCDDOM"; "UFD"; "DIVRING"; "CACHSET"; "INS"; "OINTDOM"}*/
/*"FSRED" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"FSRED" -> {"CFCAT"; "REAL"; "STEP"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"FSRED" -> {"PFECAT"; "ELTAB"; "DIFEXT"; "QFCAT"; "FEVALAB"; "OM"; "INT"}*/

"FSUPFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSUPFACT"]
/*"FSUPFACT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FSUPFACT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"FSUPFACT" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"FSUPFACT" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"}*/
"FSUPFACT" -> "FS"
/*"FSUPFACT" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"FSUPFACT" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"FSUPFACT" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"FSUPFACT" -> {"GCDDOM"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"FSUPFACT" -> {"AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"FSUPFACT" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"FSUPFACT" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"FSUPFACT" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"}*/
"FSUPFACT" -> "ACF"
/*"FSUPFACT" -> {"RADCAT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"FSUPFACT" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "QFCAT"}*/
/*"FSUPFACT" -> {"FEVALAB"; "BOOLEAN"; "CACHSET"}*/

"FSPECF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSPECF"]
/*"FSPECF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"FSPECF" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FSPECF" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FSPECF" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
"FSPECF" -> "FS"
/*"FSPECF" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"FSPECF" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"FSPECF" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/

```

```

/*"FSPECF" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "SYMBOL"; "INT"; "REF"}*/
/*"FSPECF" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"FSPECF" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"FSPECF" -> {"LNAGG-"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "SPFCAT"}*/
/*"FSPECF" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "INS-"}*/
/*"FSPECF" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"FSPECF" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"FSPECF" -> {"OM"; "ELEMFUN"}*/

"FS2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FS2"]
/*"FS2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"FS2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FS2" -> "ORDSET"*/
"FS2" -> "FS"
/*"FS2" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"FS2" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"FS2" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"}*/
/*"FS2" -> {"BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FS2" -> {"INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"; "CACHSET"}*/

"FS2UPS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FS2UPS"]
/*"FS2UPS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"FS2UPS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"FS2UPS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"FS2UPS" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"FS2UPS" -> {"RETRACT"; "LINEXP"}*/
"FS2UPS" -> "ACF"
/*"FS2UPS" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"FS2UPS" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"FS2UPS" -> "FS"
/*"FS2UPS" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"FS2UPS" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"FS2UPS" -> {"CHARZ"; "CHARNZ"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FS2UPS" -> {"OASGP"; "UPSCAT"; "PSCAT"; "AMR"; "ELTAB"; "DIFRING"}*/
/*"FS2UPS" -> {"PTRANFN"; "NNI"; "INT"; "INS-"; "POLYCAT"; "FAMR"; "PFECAT"}*/
/*"FS2UPS" -> {"BOOLEAN"; "LIST"; "ILIST"; "SYMBOL"; "REF"; "ALIST"}*/
/*"FS2UPS" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"FS2UPS" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"}*/
/*"FS2UPS" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"FS2UPS" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"FS2UPS" -> {"URAGG-"; "INS"; "OINTDOM"; "CFCAT"; "REAL"; "STEP"; "PI"}*/
/*"FS2UPS" -> {"CACHSET"; "STRICAT"; "SRAGG"; "A1AGG"}*/

"GAUSSFAC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GAUSSFAC"]
/*"GAUSSFAC" -> {"INT"; "INS-"; "EUCDOM-"; "INS"; "UFD"; "GCDDOM"; "INTDOM"}*/
/*"GAUSSFAC" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"GAUSSFAC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GAUSSFAC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"GAUSSFAC" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"GAUSSFAC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"}*/
/*"GAUSSFAC" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"GAUSSFAC" -> {"CHARZ"; "STEP"; "BOOLEAN"; "PI"; "NNI"; "UFD-"; "GCDDOM-"}*/
/*"GAUSSFAC" -> {"INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"}*/
/*"GAUSSFAC" -> {"RING-"; "ABELGRP-"; "ABELMON-"; "MONOID-"; "ORDSET-"}*/

```

```

/*"GAUSSFAC" -> {"ABELSG-"; "SGROUP-"; "LIST"; "ILIST"; "OM"; "LSAGG-"}*/
/*"GAUSSFAC" -> "STAGG-"/>
"GAUSSFAC" -> "COMPCAT"
/*"GAUSSFAC" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"GAUSSFAC" -> {"FLINEXP"; "FINITE"; "FIELD"; "DIVRING"; "DIFEXT"}*/
/*"GAUSSFAC" -> {"PDRING"; "FFIELDC"; "FPC"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"GAUSSFAC" -> {"IEVALAB"; "FPATMAB"; "TYPE"; "PATAB"; "TRANFUN"; "TRIGCAT"}*/
/*"GAUSSFAC" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"; "PFECAT"}*/

"GCNAALG" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GCNAALG"]
"GCNAALG" -> "FRNAALG"
/*"GCNAALG" -> {"FINAALG"; "NAALG"; "NARNG"; "ABELGRP"; "CABMON"}*/
/*"GCNAALG" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GCNAALG" -> {"MONAD"; "MODULE"; "BMODULE"; "LMODULE"; "RMODULE"}*/
/*"GCNAALG" -> {"COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"; "POLYCAT"}*/
/*"GCNAALG" -> {"PDRING"; "FAMR"; "AMR"; "ALGEBRA"; "CHARZ"; "CHARNZ"}*/
/*"GCNAALG" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"GCNAALG" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"GCNAALG" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "QFCAT"; "FIELD"}*/
/*"GCNAALG" -> {"EUCDOM"; "PID"; "DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/*"GCNAALG" -> {"DIFRING"; "PATAB"; "FPATMAB"; "TYPE"; "STEP"; "OINTDOM"}*/
/*"GCNAALG" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"GCNAALG" -> {"SMATCAT"; "RMATCAT"; "HOAGG"; "AGG"; "SINT"; "PI"; "NNI"}*/
/*"GCNAALG" -> {"INT"; "STRING"; "CHAR"; "OUTFORM"; "LIST"; "PRIMARR"}*/
/*"GCNAALG" -> {"A1AGG-"; "ISTRING"; "SYMBOL"; "REF"; "ALIST"; "SRAGG-"}*/
/*"GCNAALG" -> {"FLAGG-"; "LNAGG-"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"GCNAALG" -> {"VECTCAT-"; "IXAGG-"; "INS"; "CFCAT"; "OM"; "ILIST"}*/
/*"GCNAALG" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"GCNAALG" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"GCNAALG" -> "BOOLEAN"/>

"GDRAW" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GDRAW"]
"GDRAW" -> "FS"
/*"GDRAW" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"GDRAW" -> {"A1AGG-"; "ISTRING"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"GDRAW" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GDRAW" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GDRAW" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"GDRAW" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"GDRAW" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"GDRAW" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "ES"}*/
/*"GDRAW" -> {"IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "FRETRCT"}*/
/*"GDRAW" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARNZ"; "PI"; "NNI"}*/
/*"GDRAW" -> {"DIFRING"; "OM"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"GDRAW" -> {"AHYP"; "ELEMFUN"; "DFLOAT"}*/

"GENUFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GENUFACT"]
/*"GENUFACT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"GENUFACT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"GENUFACT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GENUFACT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"GENUFACT" -> {"INS"; "UFD"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"GENUFACT" -> {"OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"GENUFACT" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/

```

```

/*"GENUFACT" -> {"STEP"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"GENUFACT" -> {"CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"GENUFACT" -> {"PFECAT"; "ELTAB"; "DIFEXT"; "FIELD"; "DIVRING"}*/
/*"GENUFACT" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"GENUFACT" -> {"FFIELDC"; "FPC"; "FINITE"}*/
"GENUFACT" -> "COMPCAT"
/*"GENUFACT" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "TRANFUN"; "TRIGCAT"}*/
/*"GENUFACT" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"; "ES"}*/
"GENUFACT" -> "ACF"
/*"GENUFACT" -> "OM"*/

"GENUPS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GENUPS"]
/*"GENUPS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"GENUPS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GENUPS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"GENUPS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"; "LINEXP"}*/
"GENUPS" -> "ACF"
/*"GENUPS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"GENUPS" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"GENUPS" -> {"AHYP"; "ELEMFUN"}*/
"GENUPS" -> "FS"
/*"GENUPS" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"GENUPS" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"GENUPS" -> {"CHARZ"; "CHARNZ"; "INT"; "NNI"; "INS"; "OINTDOM"}*/
/*"GENUPS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"GENUPS" -> {"CFCAT"; "REAL"; "STEP"; "OM"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"GENUPS" -> "GCDDOM-"/

"GTSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GTSET"]
/*"GTSET" -> {"TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"GTSET" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"GTSET" -> {"KONVERT"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GTSET" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GTSET" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"}*/
/*"GTSET" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
"GTSET" -> "RPOLCAT"
/*"GTSET" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"GTSET" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"GTSET" -> {"GCDDOM"; "PFECAT"; "UFD"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"GTSET" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"GTSET" -> {"IXAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"GTSET" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"}*/
/*"GTSET" -> {"BOOLEAN"; "FINITE"}*/

"GPOLSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GPOLSET"]
/*"GPOLSET" -> {"PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"; "CLAGG"}*/
/*"GPOLSET" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "KONVERT"}*/
/*"GPOLSET" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"GPOLSET" -> {"SGROUP"; "MONOID"; "LMODULE"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"GPOLSET" -> {"OASGP"; "ORDSET"}*/
"GPOLSET" -> "RPOLCAT"
/*"GPOLSET" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"GPOLSET" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"GPOLSET" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/

```

```

/*"GPOLSET" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "LSAGG"; "STAGG"}*/
/*"GPOLSET" -> {"URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"GPOLSET" -> {"FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"GPOLSET" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"GPOLSET" -> "IXAGG-*/

"IAN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=IAN"]
/*"IAN" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"IAN" -> {"IEVALAB"; "EVALAB"}*/
"IAN" -> "ACF"
/*"IAN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"IAN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"IAN" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"IAN" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "RADCAT"; "LINEXP"}*/
/*"IAN" -> {"REAL"; "KONVERT"; "CHARZ"; "DIFRING"; "INS"; "OINTDOM"}*/
/*"IAN" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "PATMAB"}*/
/*"IAN" -> {"CFCAT"; "STEP"; "QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/*"IAN" -> {"PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"; "CHARNZ"}*/
/*"IAN" -> {"PFECAT"; "FPS"; "RNS"}*/
"IAN" -> "FS"
/*"IAN" -> {"FRETRCT"; "GROUP"; "OM"; "BOOLEAN"; "CACHSET"; "POLYCAT"}*/
/*"IAN" -> {"FAMR"; "AMR"; "INT"; "LIST"; "ILIST"; "NNI"; "UPOLYC"}*/
"IAN" -> "COMPCAT"
/*"IAN" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"IAN" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/

"INEP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INEP"]
/*"INEP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INEP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INEP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INEP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"INEP" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"INEP" -> {"ORDSET"; "INS"; "OINTDOM"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"INEP" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "OM"}*/
/*"INEP" -> {"FPS"; "RNS"; "RADCAT"; "QFCAT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"INEP" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"INEP" -> {"TYPE"; "CHARNZ"; "PFECAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"INEP" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"INEP" -> {"AMR"; "FRETRCT"; "NNI"; "INT"; "SINT"; "VECTOR"; "IVECTOR"}*/
/*"INEP" -> {"IARRAY1"; "LIST"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
"INEP" -> "COMPCAT"
/*"INEP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"}*/
/*"INEP" -> {"FPC"; "PI"}*/

"INFPRODO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INFPRODO"]
/*"INFPRODO" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"INFPRODO" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INFPRODO" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INFPRODO" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/
"INFPRODO" -> "UTSCAT"
/*"INFPRODO" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARNZ"; "ELTAB"; "DIFRING"}*/
/*"INFPRODO" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"INFPRODO" -> {"HYPCAT"; "AHYP"; "ELEMFUN"}*/

```



```

"INFSP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INFSP"]
/*"INFSP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INFSP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INFSP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"INFSP" -> {"MODULE"; "ENTIRER"; "FIELD"; "EUCDOM"; "PID"; "UFD"}*/
/*"INFSP" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"INFSP" -> {"ORDSET"; "INS"; "OINTDOM"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"INFSP" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"; "FPS"}*/
/*"INFSP" -> {"RNS"; "RADCAT"; "QFCAT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"INFSP" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"INFSP" -> {"TYPE"; "CHARNZ"; "PFECAT"; "OM"; "NNI"; "INT"; "POLYCAT"}*/
/*"INFSP" -> {"FAMR"; "AMR"; "FRETRCT"}*/
"INFSP" -> "COMPCAT"
/*"INFSP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"INFSP" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"INFSP" -> {"UPOLYC"; "LIST"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"INFSP" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"INFSP" -> {"FLAGG"; "ELAGG"; "LSAGG-"; "STAGG-"; "PRIMARR"; "PI"}*/
/*"INFSP" -> {"DIRPCAT"; "OAMONS"; "VSPACE"; "ORDFIN"; "BOOLEAN"; "ELAGG-"}*/
/*"INFSP" -> "FLAGG-*/

"INPRODFF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INPRODFF"]
/*"INPRODFF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INPRODFF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INPRODFF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INPRODFF" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INPRODFF" -> {"ENTIRER"; "UFD"; "DIVRING"; "FINITE"; "KONVERT"; "UPOLYC"}*/
/*"INPRODFF" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"INPRODFF" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"INPRODFF" -> {"LINEXP"; "ORDSET"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"INPRODFF" -> {"DIFEXT"; "STEP"; "MONOGEN"; "FRAMALG"; "FINRALG"}*/
/*"INPRODFF" -> {"FFIELDC"; "FPC"}*/
"INPRODFF" -> "UTSCAT"
/*"INPRODFF" -> {"UPSCAT"; "PSCAT"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"INPRODFF" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"INPRODFF" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"INPRODFF" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "BOOLEAN"}*/

"INPRODPF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INPRODPF"]
/*"INPRODPF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INPRODPF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INPRODPF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INPRODPF" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INPRODPF" -> {"ENTIRER"; "UFD"; "DIVRING"; "FINITE"; "KONVERT"}*/
"INPRODPF" -> "UTSCAT"
/*"INPRODPF" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"}*/
/*"INPRODPF" -> {"DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"INPRODPF" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "INS"; "OINTDOM"}*/
/*"INPRODPF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"INPRODPF" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"}*/

"INTAF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTAF"]
/*"INTAF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"}*/
/*"INTAF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/

```

```

/*"INTAF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INTAF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"}*/
"INTAF" -> "ACF"
/*"INTAF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RADCAT"}*/
"INTAF" -> "FS"
/*"INTAF" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"INTAF" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"INTAF" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "CACHSET"; "UPOLYC"}*/
/*"INTAF" -> {"POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"INTAF" -> {"DIFEXT"; "STEP"; "QFCAT"; "FEVALAB"; "OINTDOM"; "ORDRING"}*/
/*"INTAF" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "NNI"; "INT"}*/
/*"INTAF" -> {"SYMBOL"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"INTAF" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"INTAF" -> {"FLAGG-"; "LNAGG-"}*/

"INTALG" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTALG"]
/*"INTALG" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"INTALG" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"INTALG" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INTALG" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"}*/
"INTALG" -> "ACF"
/*"INTALG" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"INTALG" -> "RADCAT"*/
"INTALG" -> "FS"
/*"INTALG" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"INTALG" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"INTALG" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"INTALG" -> {"AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
"INTALG" -> "FFCAT"
/*"INTALG" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"INTALG" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"INTALG" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"INTALG" -> {"FLAGG-"; "LNAGG-"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"INTALG" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"; "VECTOR"}*/
/*"INTALG" -> {"IVECTOR"; "IARRAY1"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"INTALG" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"; "ILIST"}*/
/*"INTALG" -> {"QFCAT"; "FEVALAB"; "LSAGG-"; "STAGG-"; "ELAGG-"; "NNI"}*/
/*"INTALG" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "ELAGG"; "INS-"}*/
/*"INTALG" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "BOOLEAN"; "PI"; "CACHSET"}*/

"INTEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTEF"]
/*"INTEF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTEF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INTEF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INTEF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "CHARZ"}*/
/*"INTEF" -> {"RETRACT"; "LINEXP"}*/
"INTEF" -> "ACF"
/*"INTEF" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"INTEF" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"INTEF" -> "FS"
/*"INTEF" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"INTEF" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"INTEF" -> {"CHARNZ"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"INTEF" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/

```

```

/*"INTEF" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"; "ILIST"; "UPOLYC"}*/
/*"INTEF" -> {"POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"INTEF" -> {"DIFEXT"; "STEP"; "CACHSET"; "QFCAT"; "FEVALAB"; "OINTDOM"}*/
/*"INTEF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"INTEF" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"INTEF" -> {"LFCAT"; "PRIMCAT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"INTEF" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"INTEF" -> {"FLAGG"; "ELAGG"; "OM"}*/

"INTGO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTGO"]
/*"INTGO" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTGO" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"INTGO" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"INTGO" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"}*/
/*"INTGO" -> {"ORDSET"; "CHARZ"; "LINEXP"}*/
"INTGO" -> "FS"
/*"INTGO" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"INTGO" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"INTGO" -> {"CHARNZ"; "FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"}*/
"INTGO" -> "ACF"
/*"INTGO" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"INTGO" -> {"ELEMFUN"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"INTGO" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"INTGO" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "CACHSET"; "ILIST"; "UPOLYC"}*/
/*"INTGO" -> {"POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"INTGO" -> {"DIFEXT"; "STEP"; "QFCAT"; "FEVALAB"; "OINTDOM"; "ORDRING"}*/
/*"INTGO" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "NNI"}*/
/*"INTGO" -> {"LODOCAT"; "OREPCAT"}*/

"INTHERAL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTHERAL"]
/*"INTHERAL" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"INTHERAL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"INTHERAL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"INTHERAL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INTHERAL" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"INTHERAL" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"INTHERAL" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"INTHERAL" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"INTHERAL" -> {"DIFEXT"; "STEP"}*/
"INTHERAL" -> "FFCAT"
/*"INTHERAL" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"}*/
/*"INTHERAL" -> {"FPC"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"INTHERAL" -> {"PI"; "NNI"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"INTHERAL" -> {"OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"}*/
/*"INTHERAL" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"}*/
/*"INTHERAL" -> {"AGG"; "TYPE"; "ELTAGG"; "CLAGG"; "QFCAT"; "FEVALAB"}*/
/*"INTHERAL" -> {"PATAB"; "FPATMAB"}*/

"INTPAF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTPAF"]
/*"INTPAF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTPAF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INTPAF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INTPAF" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"; "ORDSET"}*/
/*"INTPAF" -> {"CHARZ"; "LINEXP"}*/

```

```

"INTPAF" -> "FS"
/*"INTPAF" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"INTPAF" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"INTPAF" -> {"CHARNZ"; "FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"}*/
"INTPAF" -> "ACF"
/*"INTPAF" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"INTPAF" -> {"ELEMFUN"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"INTPAF" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"INTPAF" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"INTPAF" -> {"AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"INTPAF" -> {"QFCAT"; "FEVALAB"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"INTPAF" -> {"OAMON"; "OASGP"; "REAL"; "OM"; "BOOLEAN"; "NNI"; "CACHSET"}*/
/*"INTPAF" -> {"PI"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"INTPAF" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"INTPAF" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "LODOCAT"; "OREPCAT"}*/

"INTPM" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTPM"]
/*"INTPM" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"INTPM" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INTPM" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INTPM" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "LINEXP"}*/
"INTPM" -> "ACF"
/*"INTPM" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"INTPM" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"INTPM" -> "FS"
/*"INTPM" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"INTPM" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"INTPM" -> {"CHARZ"; "CHARNZ"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"}*/
/*"INTPM" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"INTPM" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"; "OINTDOM"}*/
/*"INTPM" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"INTPM" -> {"CFCAT"; "REAL"; "STEP"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"INTPM" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"INTPM" -> {"FLAGG"; "ELAGG"; "OM"; "ILIST"; "PI"; "NNI"; "LFCAT"}*/
/*"INTPM" -> {"PRIMCAT"; "CACHSET"; "BOOLEAN"; "LSAGG-"; "POLYCAT"; "FAMR"}*/
/*"INTPM" -> {"AMR"; "PFECAT"; "UPOLYC"; "DIFEXT"; "STAGG-"; "ELAGG-"}*/
/*"INTPM" -> {"URAGG-"; "SPFCAT"}*/

"INTTOOLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTTOOLS"]
/*"INTTOOLS" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"INTTOOLS" -> "FS"
/*"INTTOOLS" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"INTTOOLS" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"}*/
/*"INTTOOLS" -> {"GROUP"; "ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"}*/
/*"INTTOOLS" -> {"RING"; "RNG"; "LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"INTTOOLS" -> {"CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"}*/
/*"INTTOOLS" -> {"RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"INTTOOLS" -> {"COMRING"; "ENTIRER"; "UFD"; "DIVRING"; "CACHSET"; "INT"}*/
/*"INTTOOLS" -> {"LIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"INTTOOLS" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"INTTOOLS" -> {"ELAGG"; "OM"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"INTTOOLS" -> {"NNI"; "BOOLEAN"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"INTTOOLS" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"INTTOOLS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "ELEMFUN"; "POLYCAT"}*/

```

```

/*"INTTOOLS" -> {"FAMR"; "AMR"; "PFECAT"; "UPOLYC"; "DIFRING"; "DIFEXT"}*/
/*"INTTOOLS" -> {"STEP"; "LFCAT"; "PRIMCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"INTTOOLS" -> {"ATRIG"; "HYPCAT"; "AHYP"}*/

"ITRIGMNP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ITRIGMNP"]
/*"ITRIGMNP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"ITRIGMNP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"ITRIGMNP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"ITRIGMNP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
"ITRIGMNP" -> "FS"
/*"ITRIGMNP" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"ITRIGMNP" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"ITRIGMNP" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"ITRIGMNP" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "RADCAT"; "TRANFUN"}*/
/*"ITRIGMNP" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "BOOLEAN"}*/
"ITRIGMNP" -> "COMPCAT"
/*"ITRIGMNP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "DIFEXT"}*/
/*"ITRIGMNP" -> {"DIFRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"}*/
/*"ITRIGMNP" -> {"PFECAT"; "OM"; "CACHSET"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"ITRIGMNP" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"ITRIGMNP" -> {"CLAGG"; "FLAGG"; "ELAGG"; "INT"; "LIST"; "ILIST"}*/
/*"ITRIGMNP" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "SINT"}*/
/*"ITRIGMNP" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"ITRIGMNP" -> {"FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"ITRIGMNP" -> {"URAGG-"; "POLYCAT"; "FAMR"; "AMR"}*/

"JORDAN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=JORDAN"]
/*"JORDAN" -> {"NAALG"; "NARNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"JORDAN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"; "MODULE"}*/
/*"JORDAN" -> {"BMODULE"; "LMODULE"; "RMODULE"}*/
"JORDAN" -> "FRNAALG"
/*"JORDAN" -> {"FINAALG"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"JORDAN" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "ALGEBRA"}*/
/*"JORDAN" -> {"ENTIRER"; "UFD"; "DIVRING"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"JORDAN" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"JORDAN" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"JORDAN" -> {"PATMAB"; "PFECAT"}*/

"KOVACIC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=KOVACIC"]
/*"KOVACIC" -> {"CHARZ"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"KOVACIC" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"KOVACIC" -> {"MONOID"; "LMODULE"}*/
"KOVACIC" -> "ACF"
/*"KOVACIC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"KOVACIC" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"KOVACIC" -> {"UFD"; "DIVRING"; "RADCAT"; "RETRACT"; "UPOLYC"}*/
/*"KOVACIC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"KOVACIC" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"KOVACIC" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"KOVACIC" -> {"DIFEXT"; "STEP"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"}*/
/*"KOVACIC" -> {"TYPE"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"KOVACIC" -> {"OASGP"; "REAL"; "PI"; "NNI"; "INT"; "LIST"; "ILIST"}*/
/*"KOVACIC" -> "BOOLEAN"*/

```

```

"LF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LF"]
/*"LF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"}*/
/*"LF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LF" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"LF" -> {"MODULE"; "ENTIRER"}*/
"LF" -> "FS"
/*"LF" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"LF" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"LF" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"LF" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "RADCAT"; "TRANFUN"}*/
/*"LF" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SYMBOL"}*/
/*"LF" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"LF" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"LF" -> {"LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"LF" -> {"PI"; "NNI"; "BOOLEAN"}*/

"LIE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LIE"]
/*"LIE" -> {"NAALG"; "NARNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LIE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "MONAD"; "MODULE"; "BMODULE"}*/
/*"LIE" -> {"LMODULE"; "RMODULE"}*/
"LIE" -> "FRNAALG"
/*"LIE" -> {"FINAALG"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"LIE" -> {"PI"; "NNI"; "INT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"LIE" -> {"INTDOM"; "ALGEBRA"; "ENTIRER"; "UFD"; "DIVRING"; "POLYCAT"}*/
/*"LIE" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"LIE" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"LIE" -> {"ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/

"LODOF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LODOF"]
/*"LODOF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"LODOF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"LODOF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"LODOF" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"LODOF" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"}*/
/*"LODOF" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"LODOF" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"LODOF" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"}*/
/*"LODOF" -> {"STEP"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"LODOF" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"LODOF" -> {"OASGP"; "REAL"; "BOOLEAN"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"LODOF" -> {"STAGG-"; "SINT"; "NNI"; "OM"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"LODOF" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"LODOF" -> {"FLAGG"; "ELAGG"; "PI"; "ELAGG-"; "MONOID-"; "ABELMON-"}*/
"LODOF" -> "ACF"
/*"LODOF" -> {"RADCAT"; "ES"}*/

"LSQM" [color="#88FF44",href="bookvol10.3.pdf#nameddest=LSQM"]
/*"LSQM" -> {"SMATCAT"; "DIFEXT"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"LSQM" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"LSQM" -> {"MONOID"; "LMODULE"; "DIFRING"; "PDRING"; "BMODULE"; "RMODULE"}*/
/*"LSQM" -> {"RMATCAT"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"LSQM" -> {"MODULE"; "COMRING"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"LSQM" -> "ALGEBRA"*/
"LSQM" -> "FRNAALG"

```

```

/*"LSQM" -> {"FINAALG"; "NAALG"; "NARNG"; "MONAD"; "INTDOM"; "ENTIRER"}*/
/*"LSQM" -> {"PI"; "NNI"; "INT"; "SINT"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"LSQM" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"LSQM" -> {"ELTAB"; "CLAGG"; "KONVERT"; "ORDSET"; "VECTCAT-"; "A1AGG-"}*/
/*"LSQM" -> {"FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"}*/
/*"LSQM" -> {"AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "EUCDOM"; "PID"}*/
/*"LSQM" -> {"GCDDOM"; "FIELD"; "UFD"; "DIVRING"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"LSQM" -> {"CHARZ"; "CHARNZ"; "PATMAB"; "PFECAT"; "INS"; "OINTDOM"}*/
/*"LSQM" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"}*/
/*"LSQM" -> {"REAL"; "STEP"}*/

"OMEXPR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OMEXPR"]
/*"OMEXPR" -> {"OM"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RING"}*/
/*"OMEXPR" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"OMEXPR" -> {"MONOID"; "LMODULE"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"OMEXPR" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"OMEXPR" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"OMEXPR" -> {"FLAGG"; "ELAGG"; "INT"; "LIST"; "ILIST"; "NNI"; "LSAGG-"}*/
/*"OMEXPR" -> {"STAGG-"; "PI"; "SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"}*/
/*"OMEXPR" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"OMEXPR" -> {"FLAGG-"; "LNAGG-"}*/
"OMEXPR" -> "FS"
/*"OMEXPR" -> {"ES"; "RETRACT"; "PATAB"; "FPATMAB"; "PATMAB"; "FRETRCT"}*/
/*"OMEXPR" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"}*/
/*"OMEXPR" -> {"ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"}*/
/*"OMEXPR" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"}*/
/*"OMEXPR" -> "DIVRING"*/

"MCMPLEX" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MCMPLEX"]
/*"MCMPLEX" -> {"FMTC"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"MCMPLEX" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MCMPLEX" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"MCMPLEX" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"}*/
"MCMPLEX" -> "COMPCAT"
/*"MCMPLEX" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARZ"; "CHARNZ"}*/
/*"MCMPLEX" -> {"KONVERT"; "FRETRCT"; "FLINEXP"; "LINEXP"; "FINITE"}*/
/*"MCMPLEX" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"MCMPLEX" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FFIELDC"; "FPC"; "STEP"}*/
/*"MCMPLEX" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"}*/
/*"MCMPLEX" -> {"PATMAB"; "PATAB"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"MCMPLEX" -> {"AHYP"; "ELEMFUN"; "RADCAT"; "PFECAT"; "FPS"; "RNS"}*/
/*"MCMPLEX" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"MCMPLEX" -> {"INS"; "OINTDOM"; "CFCAT"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"MCMPLEX" -> {"AMR"; "OAMONS"}*/

"MULTFACT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=MULTFACT"]
/*"MULTFACT" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "OAMONS"; "OCAMON"}*/
/*"MULTFACT" -> {"OAMON"; "OASGP"; "ABELMON"; "ABELSG"; "CABMON"; "EUCDOM"}*/
/*"MULTFACT" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"MULTFACT" -> {"ABELGRP"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"MULTFACT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/
/*"MULTFACT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"MULTFACT" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"MULTFACT" -> {"KONVERT"; "PATMAB"; "PFECAT"; "UFD"; "INS"; "OINTDOM"}*/

```

```

/*"MULTFACT" -> {"ORDRING"; "OAGROUP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"}*/
"MULTFACT" -> "COMPCAT"
/*"MULTFACT" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FIELD"}*/
/*"MULTFACT" -> {"DIVRING"; "DIFEXT"; "FFIELDC"; "FPC"; "FEVALAB"; "ELTAB"}*/
/*"MULTFACT" -> {"FPATMAB"; "TYPE"; "PATAB"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"MULTFACT" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "RADCAT"; "UPOLYC"}*/

/* MYEXPR and MYUP are mutually dependent */
/* We remove them and create a new node */
"MYEXPR/MYUP" [color="blue",href="bookvol10.3.pdf#nameddest=MYEXPR"]
"MYEXPR/MYUP" -> "FS"

/*"MYEXPR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MYEXPR"]*/
/*"MYEXPR" -> "MYUP"*/ /* clique1.spad */
/*"MYEXPR" -> {"FS"; "ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MYEXPR" -> {"RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"MYEXPR" -> {"TYPE"; "PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"; "GROUP"}*/
/*"MYEXPR" -> {"ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"; "RING"; "RNG"}*/
/*"MYEXPR" -> {"LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"}*/
/*"MYEXPR" -> {"ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDDOM"}*/
/*"MYEXPR" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"}*/
/*"MYEXPR" -> {"DIVRING"; "COMBOPC"; "CFCAT"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"MYEXPR" -> {"PFECAT"; "UPOLYC"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"MYEXPR" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"MYEXPR" -> {"OASGP"; "REAL"; "FPS"; "RNS"; "RADCAT"; "QFCAT"}*/
/*"MYEXPR" -> {"FEVALAB"; "CACHSET"}*/

/*"MYUP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=MYUP"]*/
/*"MYUP" -> "MYEXPR"*/ /* clique1.spad */
/*"MYUP" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"MYUP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"MYUP" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"MYUP" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"MYUP" -> {"INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"MYUP" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
/*"MYUP" -> {"PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"MYUP" -> {"EUCDDOM"; "PID"; "FIELD"; "DIVRING"; "NNI"; "INT"; "FPS"}*/
/*"MYUP" -> {"RNS"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"MYUP" -> {"REAL"; "RADCAT"; "INS"; "OINTDOM"; "CFCAT"}*/

"NAGF01" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGF01"]
/*"NAGF01" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"NAGF01" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"NAGF01" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "FPS"; "RNS"; "FIELD"}*/
/*"NAGF01" -> {"EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"NAGF01" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"NAGF01" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"NAGF01" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"NAGF01" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"NAGF01" -> {"REAL"; "KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
/*"NAGF01" -> {"INS"; "OINTDOM"; "DIFRING"; "LINEXP"; "CFCAT"; "STEP"}*/
"NAGF01" -> "COMPCAT"
/*"NAGF01" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"NAGF01" -> {"FLINEXP"; "FINITE"; "DIFEXT"; "PDRING"; "FFIELDC"; "FPC"}*/

```



```

/*"NAGF01" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"}*/
/*"NAGF01" -> {"PATAB"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"NAGF01" -> {"ELEMFUN"; "PFECAT"}*/

"NAGF02" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGF02"]
/*"NAGF02" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"NAGF02" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"NAGF02" -> {"FLAGG-"; "LNAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"NAGF02" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NAGF02" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"NAGF02" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"NAGF02" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"NAGF02" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"NAGF02" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "INS-"}*/
/*"NAGF02" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"NAGF02" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"NAGF02" -> {"ABELMON-"; "MONOID-"; "ORDSET-"; "ABELSG-"; "SGROUP-"}*/
/*"NAGF02" -> {"DFLOAT"; "PI"; "NNI"}*/
"NAGF02" -> "COMPCAT"
/*"NAGF02" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"NAGF02" -> {"FLINEXP"; "LINEXP"; "FINITE"; "DIFEXT"; "DIFRING"}*/
/*"NAGF02" -> {"PDRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"}*/
/*"NAGF02" -> {"ELTAB"; "EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"}*/
/*"NAGF02" -> {"PATAB"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"NAGF02" -> {"AHYP"; "ELEMFUN"; "PFECAT"}*/

"NAGF04" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NAGF04"]
/*"NAGF04" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"NAGF04" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"NAGF04" -> {"FLAGG-"; "LNAGG-"; "FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"}*/
/*"NAGF04" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NAGF04" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"NAGF04" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"NAGF04" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"}*/
/*"NAGF04" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"}*/
/*"NAGF04" -> {"KONVERT"; "RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"}*/
"NAGF04" -> "COMPCAT"
/*"NAGF04" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "CHARNZ"; "FRETRCT"}*/
/*"NAGF04" -> {"FLINEXP"; "LINEXP"; "FINITE"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"NAGF04" -> {"FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"NAGF04" -> {"IEVALAB"; "FPATMAB"; "TYPE"; "PATAB"; "TRANFUN"; "TRIGCAT"}*/
/*"NAGF04" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PFECAT"; "INS"}*/
/*"NAGF04" -> {"OINTDOM"; "CFCAT"; "DFLOAT"}*/

"NCEP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NCEP"]
/*"NCEP" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"NCEP" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"NCEP" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"NCEP" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"NCEP" -> {"DIVRING"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"NCEP" -> {"ORDSET"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"NCEP" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"NCEP" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "INS"; "OINTDOM"; "DIFRING"}*/
/*"NCEP" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/

```

```

/*"NCEP" -> {"CHARZ"; "STEP"; "QFCAT"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"NCEP" -> {"IEVALAB"; "DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"NCEP" -> {"TYPE"; "CHARNZ"; "PFECAT"}*/
"NCEP" -> "COMPCAT"
/*"NCEP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FRETRCT"; "FINITE"; "FFIELDC"}*/
/*"NCEP" -> {"FPC"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"NCEP" -> {"ELEMFUN"; "RADCAT"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"}*/

"NLINSOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NLINSOL"]
/*"NLINSOL" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"NLINSOL" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NLINSOL" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"NLINSOL" -> {"MODULE"; "ENTIRER"; "ORDSET"; "KONVERT"; "OM"; "PATMAB"}*/
/*"NLINSOL" -> {"INT"; "LIST"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"NLINSOL" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"NLINSOL" -> {"FLINEXP"; "LINEXP"; "GCDDOM"; "PFECAT"; "UFD"}*/
"NLINSOL" -> "ACF"
/*"NLINSOL" -> {"FIELD"; "EUCDOM"; "PID"; "DIVRING"; "RADCAT"; "ILIST"}*/
/*"NLINSOL" -> {"LSAGG-"; "STAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"NLINSOL" -> {"HOAGG"; "AGG"; "TYPE"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"NLINSOL" -> {"CLAGG"; "FLAGG"; "ELAGG"; "NNI"; "INS"; "OINTDOM"}*/
/*"NLINSOL" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"NLINSOL" -> {"CFCAT"; "REAL"; "STEP"; "QFCAT"; "FEVALAB"; "DIFEXT"}*/
/*"NLINSOL" -> {"PATAB"; "FPATMAB"}*/

"NSMP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NSMP"]
"NSMP" -> "RPOLCAT"
/*"NSMP" -> {"POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"NSMP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NSMP" -> {"MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"NSMP" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"NSMP" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"NSMP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"}*/
/*"NSMP" -> {"UFD"; "NNI"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"NSMP" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"NSMP" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"NSMP" -> {"BASTYPE-"; "BOOLEAN"; "MONOID-"; "ABELMON-"; "PI"; "EUCDOM"}*/
/*"NSMP" -> {"PID"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"NSMP" -> {"OAMON"; "OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"; "QFCAT"}*/
/*"NSMP" -> {"FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"; "PATAB"}*/
/*"NSMP" -> {"FPATMAB"; "TYPE"; "FPS"; "RNS"; "RADCAT"; "UPOLYC"}*/

"NUMERIC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NUMERIC"]
/*"NUMERIC" -> {"KONVERT"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"NUMERIC" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"NUMERIC" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
"NUMERIC" -> "COMPCAT"
/*"NUMERIC" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "ALGEBRA"; "MODULE"}*/
/*"NUMERIC" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "FLINEXP"}*/
/*"NUMERIC" -> {"LINEXP"; "FINITE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"NUMERIC" -> {"INTDOM"; "ENTIRER"; "UFD"; "DIVRING"; "DIFEXT"; "DIFRING"}*/
/*"NUMERIC" -> {"PDRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"}*/
/*"NUMERIC" -> {"EVALAB"; "IEVALAB"; "FPATMAB"; "TYPE"; "PATMAB"; "PATAB"}*/
/*"NUMERIC" -> {"ORDSET"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/

```

```

/*"NUMERIC" -> {"ELEMFUN"; "RADCAT"; "PFECAT"; "FPS"; "RNS"; "ORDRING"}*/
/*"NUMERIC" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "OM"}*/
/*"NUMERIC" -> {"POLYCAT"; "FAMR"; "AMR"}*/

"OCT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=OCT"]
"OCT" -> "OC"
/*"OCT" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"OCT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OCT" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"}*/
/*"OCT" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FINITE"; "ORDSET"}*/
/*"OCT" -> {"KONVERT"; "CHARZ"; "CHARNZ"; "COMRING"}*/
"OCT" -> "QUATCAT"
/*"OCT" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "ENTIRER"}*/
/*"OCT" -> {"DIVRING"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"OCT" -> {"UFD"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"OCT" -> {"OASGP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"; "RNS"; "RADCAT"}*/

"OCTCT2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=OCTCT2"]
"OCTCT2" -> "OC"
/*"OCTCT2" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"OCTCT2" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"OCTCT2" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "FRETRCT"}*/
/*"OCTCT2" -> {"RETRACT"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FINITE"}*/
/*"OCTCT2" -> {"ORDSET"; "KONVERT"; "CHARZ"; "CHARNZ"; "COMRING"}*/

"ODEPAL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODEPAL"]
/*"ODEPAL" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODEPAL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODEPAL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ODEPAL" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ODEPAL" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"}*/
/*"ODEPAL" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"ODEPAL" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"ODEPAL" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
"ODEPAL" -> "FFCAT"
/*"ODEPAL" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"ODEPAL" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"ODEPAL" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"ODEPAL" -> {"LODOCAT"; "OREPCAT"}*/

"ODERTRIC" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODERTRIC"]
/*"ODERTRIC" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"ODERTRIC" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ODERTRIC" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"ODERTRIC" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ODERTRIC" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"; "UPOLYC"}*/
/*"ODERTRIC" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"; "FRETRCT"}*/
/*"ODERTRIC" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"ODERTRIC" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"ODERTRIC" -> {"DIFEXT"; "STEP"; "SYMBOL"; "INT"; "REF"; "ALIST"}*/
/*"ODERTRIC" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"ODERTRIC" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"ODERTRIC" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"ODERTRIC" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/

```

```

/*"ODERTRIC" -> {"ILIST"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ODERTRIC" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"ODERTRIC" -> {"FLAGG"; "ELAGG"; "OM"; "BOOLEAN"}*/
"ODERTRIC" -> "UTSCAT"
/*"ODERTRIC" -> {"UPSCAT"; "PSCAT"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"ODERTRIC" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"ODERTRIC" -> "ACF"
/*"ODERTRIC" -> {"LSAGG-"; "STAGG-"}*/

"PACEXTC" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PACEXTC"]
"PACEXTC" -> "PACRAT"
/*"PACEXTC" -> {"PACRATC"; "PACPERC"; "FIELD"; "EUCDDOM"; "PID"; "GCDDOM"}*/
/*"PACEXTC" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PACEXTC" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"PACEXTC" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PACEXTC" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"PACEXTC" -> {"DIVRING"; "CHARZ"; "RETRACT"; "XF"; "VSPACE"}*/
/*"PACEXTC" -> {"FPC"; "CHARNZ"; "FINITE"}*/

"PADE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PADE"]
/*"PADE" -> {"FIELD"; "EUCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PADE" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PADE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PADE" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"PADE" -> "DIVRING"*/
"PADE" -> "UTSCAT"
/*"PADE" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"}*/
/*"PADE" -> {"DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"PADE" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "UPOLYC"; "POLYCAT"}*/
/*"PADE" -> {"FAMR"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PADE" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"; "DIFEXT"}*/
/*"PADE" -> {"STEP"; "NNI"; "INT"; "SINT"; "LIST"; "ILIST"; "PI"}*/

"PAN2EXPR" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PAN2EXPR"]
/*"PAN2EXPR" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PAN2EXPR" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"PAN2EXPR" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PAN2EXPR" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"PAN2EXPR" -> {"EUCDDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PAN2EXPR" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"PAN2EXPR" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/
/*"PAN2EXPR" -> {"STEP"; "ES"; "IEVALAB"; "EVALAB"}*/
"PAN2EXPR" -> "ACF"
/*"PAN2EXPR" -> {"FIELD"; "DIVRING"; "RADCAT"}*/
"PAN2EXPR" -> "FS"
/*"PAN2EXPR" -> {"PATAB"; "FPATMAB"; "TYPE"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"PAN2EXPR" -> {"FLINEXP"; "CHARNZ"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"PAN2EXPR" -> {"PFECAT"; "OM"}*/

"PFO" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFO"]
/*"PFO" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"}*/
/*"PFO" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PFO" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PFO" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"}*/

```

```

"PFO" -> "FS"
/*"PFO" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"PFO" -> {"TYPE"; "PATMAB"; "FRETRACT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"PFO" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"PFO" -> {"GCDDOM"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"PFO" -> {"AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
"PFO" -> "FFCAT"
/*"PFO" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"PFO" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PFO" -> {"OASGP"; "CFCAT"; "REAL"; "QFCAT"; "FEVALAB"; "CACHSET"}*/
/*"PFO" -> {"INT"; "LIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"PFO" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"PFO" -> {"OM"; "ILIST"; "NNI"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"}*/
/*"PFO" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "LSAGG-"; "PI"; "INTDOM-"}*/
/*"PFO" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"PFO" -> {"ABELGRP-"; "ABELMON-"; "VECTCAT"; "A1AGG"; "BOOLEAN"}*/

"PFOQ" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PFOQ"]
/*"PFOQ" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PFOQ" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PFOQ" -> {"SGROUP"; "MONOID"; "LMODULE"; "FAMR"; "AMR"; "BMODULE"}*/
/*"PFOQ" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"PFOQ" -> {"INTDOM"; "ENTIRER"; "FRETRACT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PFOQ" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"}*/
/*"PFOQ" -> {"PFECAT"; "UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"PFOQ" -> {"EUCDOM"; "PID"; "FIELD"; "DIVRING"}*/
"PFOQ" -> "FFCAT"
/*"PFOQ" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"PFOQ" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PFOQ" -> {"OASGP"; "CFCAT"; "REAL"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"PFOQ" -> {"FPATMAB"; "TYPE"; "OM"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"PFOQ" -> {"NNI"; "INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "PI"; "INTDOM-"}*/
/*"PFOQ" -> {"ALGEBRA-"; "DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"}*/
/*"PFOQ" -> {"ABELGRP-"; "ABELMON-"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"PFOQ" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/

"PLACES" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PLACES"]
/*"PLACES" -> {"PLACESC"; "SETCATD"; "LOCPOWC"; "DIV"}*/
"PLACES" -> "NSDPS"
"PLACES" -> "PLCS"
/*"PLACES" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"}*/
/*"PLACES" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"PLACES" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PLACES" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"PLACES" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/

"PLACESPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PLACESPS"]
/*"PLACESPS" -> {"PLCS"; "PLACESC"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"PLACESPS" -> "PACOFF"
/*"PLACESPS" -> {"PACFFC"; "FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"}*/
/*"PLACESPS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"PLACESPS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"PLACESPS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PLACESPS" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"}*/

```

```

/*"PLACESPS" -> {"DIFRING"; "PACPERC"}*/

"PICOERCE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PICOERCE"]
/*"PICOERCE" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"PICOERCE" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"PICOERCE" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"PICOERCE" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "INS"; "UFD"}*/
/*"PICOERCE" -> {"GCDDOM"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"PICOERCE" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "KONVERT"; "RETRACT"}*/
/*"PICOERCE" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
/*"PICOERCE" -> {"UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"PICOERCE" -> {"FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/
/*"PICOERCE" -> {"ELTAB"; "DIFEXT"; "FIELD"; "DIVRING"}*/
"PICOERCE" -> "FS"
/*"PICOERCE" -> {"ES"; "PATAB"; "FPATMAB"; "TYPE"; "GROUP"}*/

"PMASSFS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMASSFS"]
/*"PMASSFS" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"PMASSFS" -> "FS"
/*"PMASSFS" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"PMASSFS" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"}*/
/*"PMASSFS" -> {"GROUP"; "ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"; "RING"}*/
/*"PMASSFS" -> {"RNG"; "LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"}*/
/*"PMASSFS" -> {"CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "FIELD"}*/
/*"PMASSFS" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"PMASSFS" -> {"UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"}*/

"PMFS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMFS"]
/*"PMFS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"; "COMRING"; "RING"}*/
/*"PMFS" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"PMFS" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"PMFS" -> {"ENTIRER"; "ORDSET"; "PATMAB"}*/
"PMFS" -> "FS"
/*"PMFS" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"PMFS" -> {"FPATMAB"; "TYPE"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"PMFS" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"PMFS" -> {"GCDDOM"; "UFD"; "DIVRING"; "CACHSET"; "INT"; "LIST"; "ILIST"}*/
/*"PMFS" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/

"PMPREDFS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PMPREDFS"]
/*"PMPREDFS" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
"PMPREDFS" -> "FS"
/*"PMPREDFS" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"PMPREDFS" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"}*/
/*"PMPREDFS" -> {"GROUP"; "ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"; "RING"}*/
/*"PMPREDFS" -> {"RNG"; "LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"}*/
/*"PMPREDFS" -> {"CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"}*/
/*"PMPREDFS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PMPREDFS" -> {"ENTIRER"; "UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"}*/
/*"PMPREDFS" -> {"LSAGG-"; "STAGG-"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"PMPREDFS" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"PMPREDFS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"}*/

```

```

"PSETCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=PSETCAT",

```

```

        shape=ellipse]
/*"PSETCAT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "CLAGG"; "HOAGG"; "AGG"}*/
/*"PSETCAT" -> {"TYPE"; "EVALAB"; "IEVALAB"; "KONVERT"; "RING"; "RNG"}*/
/*"PSETCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"PSETCAT" -> {"MONOID"; "LMODULE"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"PSETCAT" -> {"OASGP"; "ORDSET"}*/
"PSETCAT" -> "RPOLCAT"
/*"PSETCAT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"PSETCAT" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"PSETCAT" -> {"ENTIRER"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"PSETCAT" -> {"PATMAB"; "GCDDOM"; "PFECAT"; "UFD"; "INT"; "LIST"; "ILIST"}*/
/*"PSETCAT" -> {"LSAGG-"; "STAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"PSETCAT" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"}*/
/*"PSETCAT" -> {"OM"; "ELAGG-"; "FLAGG-"; "BOOLEAN"; "URAGG-"; "LNAGG-"}*/
/*"PSETCAT" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "EUCDOM"; "PID"}*/

"PSETCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PSETCAT",
        shape=ellipse]
/*"PSETCAT-" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "CLAGG"; "HOAGG"}*/
/*"PSETCAT-" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "KONVERT"; "RING"}*/
/*"PSETCAT-" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PSETCAT-" -> {"SGROUP"; "MONOID"; "LMODULE"; "OAMONS"; "OCAMON"}*/
/*"PSETCAT-" -> {"OAMON"; "OASGP"; "ORDSET"}*/
"PSETCAT-" -> "RPOLCAT"
/*"PSETCAT-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "BMODULE"}*/
/*"PSETCAT-" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"}*/
/*"PSETCAT-" -> {"CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"; "RETRACT"}*/
/*"PSETCAT-" -> {"FLINEXP"; "LINEXP"; "PATMAB"; "GCDDOM"; "PFECAT"}*/
/*"PSETCAT-" -> {"UFD"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"PSETCAT-" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"PSETCAT-" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"; "ELAGG-"}*/
/*"PSETCAT-" -> {"FLAGG-"; "BOOLEAN"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"PSETCAT-" -> {"IXAGG-"; "CLAGG-"; "EUCDOM"; "PID"}*/

"PROJPLPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PROJPLPS"]
/*"PROJPLPS" -> {"PRSPCAT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"PROJPLPS" -> {"PACFFC"}*/
"PROJPLPS" -> "PACOFF"
/*"PROJPLPS" -> {"FFIELD"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"PROJPLPS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PROJPLPS" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PROJPLPS" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"PROJPLPS" -> {"DIVRING"; "CHARNZ"; "FINITE"; "STEP"; "DIFRING"; "PACPERC"}*/

"PSETPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=PSETPK"]
/*"PSETPK" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"PSETPK" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"PSETPK" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"PSETPK" -> {"MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"PSETPK" -> {"OASGP"; "ORDSET"}*/
"PSETPK" -> "RPOLCAT"
/*"PSETPK" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"PSETPK" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"PSETPK" -> {"LINEXP"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"; "UFD"}*/

```

```

/*"PSETPK" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PSETPK" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"PSETPK" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"PSETPK" -> {"ELAGG-"; "BOOLEAN"; "FLAGG-"; "NNI"; "TSETCAT"; "PSETCAT"}*/
/*"PSETPK" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "EUCDOM"}*/
/*"PSETPK" -> "PID"*/

"QUAT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=QUAT"]
"QUAT" -> "QUATCAT"
/*"QUAT" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"QUAT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"QUAT" -> {"LMODULE"; "MODULE"; "BMODULE"; "RMODULE"; "FRETRCT"; "RETRACT"}*/
/*"QUAT" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FEVALAB"; "ELTAB"; "EVALAB"}*/
/*"QUAT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ENTIRER"; "ORDSET"; "DIVRING"}*/
/*"QUAT" -> {"KONVERT"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"QUAT" -> {"GCDDOM"; "INTDOM"; "COMRING"; "UFD"; "INS"; "OINTDOM"}*/
/*"QUAT" -> "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "PATMAB"}*/
/*"QUAT" -> "CFCAT"; "REAL"; "STEP"; "RNS"; "RADCAT"}*/

"QUATCT2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=QUATCT2"]
"QUATCT2" -> "QUATCAT"
/*"QUATCT2" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"QUATCT2" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"QUATCT2" -> {"MONOID"; "LMODULE"; "MODULE"; "BMODULE"; "RMODULE"}*/
/*"QUATCT2" -> {"FRETRCT"; "RETRACT"; "DIFEXT"; "DIFRING"; "PDRING"}*/
/*"QUATCT2" -> {"FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"QUATCT2" -> {"LINEXP"; "ENTIRER"; "ORDSET"; "DIVRING"; "KONVERT"}*/
/*"QUATCT2" -> {"CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"QUATCT2" -> {"INTDOM"; "COMRING"; "UFD"}*/

"RADFF" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RADFF"]
"RADFF" -> "FFCAT"
/*"RADFF" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "ALGEBRA"; "RING"; "RNG"}*/
/*"RADFF" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RADFF" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "MODULE"; "BMODULE"}*/
/*"RADFF" -> {"RMODULE"; "CHARZ"; "CHARNZ"; "COMRING"; "KONVERT"; "FRETRCT"}*/
/*"RADFF" -> {"RETRACT"; "FLINEXP"; "LINEXP"; "FINITE"; "FIELD"; "EUCDOM"}*/
/*"RADFF" -> {"PID"; "GCDDOM"; "INTDOM"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"RADFF" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FFIELDC"; "FPC"; "STEP"}*/
/*"RADFF" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "EVALAB"; "IEVALAB"}*/
/*"RADFF" -> {"ORDSET"; "PATMAB"; "PFECAT"; "ELTAB"; "QFCAT"; "FEVALAB"}*/
/*"RADFF" -> {"PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"RADFF" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "NNI"; "INT"; "BOOLEAN"}*/
/*"RADFF" -> {"VECTOR"; "IVECTOR"; "IARRAY1"; "INS"; "CFCAT"; "OM"; "SINT"}*/
/*"RADFF" -> {"VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"}*/
/*"RADFF" -> {"ELTAGG"; "CLAGG"; "PRIMARR"; "A1AGG-"; "FLAGG-"; "LNAGG-"}*/
/*"RADFF" -> {"LIST"; "ILIST"; "LSAGG-"; "PI"; "OAMONS"}*/

"RDEEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RDEEF"]
/*"RDEEF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RDEEF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RDEEF" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RDEEF" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"RDEEF" -> {"CHARZ"; "RETRACT"; "LINEXP"; "TRANFUN"; "TRIGCAT"}*/

```



```

/*"RDEEF" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"RDEEF" -> "ACF"
/*"RDEEF" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
"RDEEF" -> "FS"
/*"RDEEF" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"RDEEF" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"RDEEF" -> {"CHARNZ"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"RDEEF" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"RDEEF" -> {"ELAGG"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"}*/
/*"RDEEF" -> {"DIFRING"; "DIFEXT"; "STEP"; "SYMBOL"; "INT"; "REF"; "ALIST"}*/
/*"RDEEF" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"RDEEF" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "OM"}*/
/*"RDEEF" -> {"CACHSET"; "ILIST"; "BOOLEAN"; "NNI"; "INS"; "OINTDOM"}*/
/*"RDEEF" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"RDEEF" -> "CFCAT"; "REAL"; "PI"}*/

"RDEEFS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RDEEFS"]
/*"RDEEFS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RDEEFS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RDEEFS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"RDEEFS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "CHARZ"; "RETRACT"}*/
/*"RDEEFS" -> {"LINEXP"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"RDEEFS" -> {"AHYP"; "ELEMFUN"}*/
"RDEEFS" -> "ACF"
/*"RDEEFS" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
"RDEEFS" -> "FS"
/*"RDEEFS" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"RDEEFS" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"RDEEFS" -> {"CHARNZ"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"}*/
/*"RDEEFS" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "INT"; "LIST"; "ILIST"}*/
/*"RDEEFS" -> {"CACHSET"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/

"RDIV" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RDIV"]
/*"RDIV" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"RDIV" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"RDIV" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RDIV" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"RDIV" -> {"DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"RDIV" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"RDIV" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"RDIV" -> {"ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
"RDIV" -> "FFCAT"
/*"RDIV" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELDC"; "FPC"}*/
/*"RDIV" -> {"QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "OINTDOM"}*/
/*"RDIV" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/

"RSETCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=RSETCAT"]
/*"RSETCAT" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RSETCAT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RSETCAT" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RSETCAT" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "TSETCAT"}*/
/*"RSETCAT" -> {"PSETCAT"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"RSETCAT" -> {"IEVALAB"; "KONVERT"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"RSETCAT" -> {"OASGP"; "ORDSET"}*/

```

```

"RSETCAT" -> "RPOLCAT"
/*"RSETCAT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"RSETCAT" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"RSETCAT" -> {"PFECAT"; "UFD"; "BOOLEAN"; "INT"; "LIST"; "ILIST"}*/
/*"RSETCAT" -> {"FINITE"; "NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"RSETCAT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"RSETCAT" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"; "URAGG-"}*/
/*"RSETCAT" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/

"RSETCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RSETCAT"]
/*"RSETCAT-" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"RSETCAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RSETCAT-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RSETCAT-" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"RSETCAT-" -> {"TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"RSETCAT-" -> {"EVALAB"; "IEVALAB"; "KONVERT"; "OAMONS"; "OCAMON"}*/
/*"RSETCAT-" -> {"OAMON"; "OASGP"; "ORDSET"}*/
"RSETCAT-" -> "RPOLCAT"
/*"RSETCAT-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"RSETCAT-" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"RSETCAT-" -> {"PFECAT"; "UFD"; "BOOLEAN"; "INT"; "LIST"; "ILIST"}*/
/*"RSETCAT-" -> {"FINITE"; "NNI"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"RSETCAT-" -> {"FLAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"RSETCAT-" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"}*/
/*"RSETCAT-" -> {"OM"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/

"RSETGCD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RSETGCD"]
/*"RSETGCD" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RSETGCD" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RSETGCD" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"RSETGCD" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"}*/
/*"RSETGCD" -> {"OAMON"; "OASGP"; "ORDSET"}*/
"RSETGCD" -> "RPOLCAT"
/*"RSETGCD" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"RSETGCD" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"RSETGCD" -> {"LINEXP"; "KONVERT"; "PATMAB"; "PFECAT"; "UFD"; "RSETCAT"}*/
/*"RSETGCD" -> {"TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"RSETGCD" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"RSETGCD" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "BOOLEAN"; "INT"}*/
/*"RSETGCD" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"RSETGCD" -> {"OM"; "NNI"; "INS-"}*/

"RULE" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RULE"]
/*"RULE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ELTAB"; "RETRACT"}*/
"RULE" -> "FS"
/*"RULE" -> {"ES"; "ORDSET"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"RULE" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"}*/
/*"RULE" -> {"GROUP"; "ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"; "RING"}*/
/*"RULE" -> {"RNG"; "LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"}*/
/*"RULE" -> {"CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "FIELD"}*/
/*"RULE" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"}*/
/*"RULE" -> {"UFD"; "DIVRING"; "INT"; "LIST"; "ILIST"; "OM"; "BOOLEAN"}*/
/*"RULE" -> {"LSAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"RULE" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/

```

```

/*"RULE" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"RULE" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/

"RULESET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RULESET"]
/*"RULESET" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ELTAB"}*/
"RULESET" -> "FS"
/*"RULESET" -> {"ES"; "ORDSET"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"RULESET" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "MONOID"}*/
/*"RULESET" -> {"SGROUP"; "GROUP"; "ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"}*/
/*"RULESET" -> {"RING"; "RNG"; "LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"RULESET" -> {"CHARZ"; "CHARNZ"; "ALGEBRA"; "MODULE"; "BMODULE"}*/
/*"RULESET" -> {"RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"RULESET" -> {"COMRING"; "ENTIRER"; "UFD"; "DIVRING"; "INT"; "LIST"}*/
/*"RULESET" -> {"ILIST"; "FSAGG"; "DIAGG"; "DIOPS"; "BGAGG"; "HOAGG"}*/
/*"RULESET" -> {"AGG"; "CLAGG"; "SETAGG"; "FINITE"}*/

"SD" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SD",
      shape=ellipse]
/*"SD" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"SD" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MODULE"; "BMODULE"; "LMODULE"}*/
/*"SD" -> {"RMODULE"; "RETRACT"; "ES"; "ORDSET"; "IEVALAB"; "EVALAB"}*/
/*"SD" -> {"PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"}*/
/*"SD" -> {"MONOID"; "GROUP"; "RING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"SD" -> {"CHARZ"; "CHARNZ"; "ALGEBRA"; "FIELD"; "EUCDOM"; "PID"}*/
/*"SD" -> {"GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"SD" -> {"NNI"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"SD" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"SD" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/*"SD" -> {"BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SD" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/
/*"SD" -> {"FLAGG"; "ELAGG"; "OM"; "PI"; "SYMBOL"; "REF"; "ALIST"}*/
/*"SD" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"SD" -> {" ISTRING"; "SRAGG-";- " BOOLEAN"; "BSD"}*/
"SD" -> "FS"

"SIGNEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SIGNEF"]
/*"SIGNEF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SIGNEF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"SIGNEF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"SIGNEF" -> {"MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"; "LINEXP"; "GCDDOM"}*/
/*"SIGNEF" -> {"ACF"; "FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"SIGNEF" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"SIGNEF" -> "FS"
/*"SIGNEF" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"SIGNEF" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"SIGNEF" -> {"CHARZ"; "CHARNZ"; "NNI"; "INT"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"SIGNEF" -> {"PFECAT"; "CACHSET"; "LIST"; "ILIST"; "SYMBOL"; "REF"}*/
/*"SIGNEF" -> {"ALIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"SIGNEF" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"}*/
/*"SIGNEF" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"SIGNEF" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "FPS"}*/
/*"SIGNEF" -> {"RNS"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SIGNEF" -> {"REAL"; "DIFRING"; "INTCAT"; "QFCAT"; "FEVALAB"; "DIFEXT"}*/
/*"SIGNEF" -> {"STEP"; "OINTDOM"; "PI"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/

```

```

/*"SIGNEF" -> {"URAGG-"; "INS-"}*/

"SIMPAN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SIMPAN"]
/*"SIMPAN" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"SIMPAN" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SIMPAN" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SIMPAN" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"SIMPAN" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"SIMPAN" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"SIMPAN" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"}*/
"SIMPAN" -> "FS"
/*"SIMPAN" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"SIMPAN" -> {"FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"SIMPAN" -> {"FIELD"; "DIVRING"}*/

"SFORT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SFORT"]
/*"SFORT" -> {"FORTCAT"; "TYPE"; "KOERCE"; "ORDSET"; "SETCAT"; "BASTYPE"}*/
"SFORT" -> "FS"
/*"SFORT" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"SFORT" -> {"FPATMAB"; "PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"; "GROUP"}*/
/*"SFORT" -> {"ABELMON"; "ABELSG"; "ABELGRP"; "CABMON"; "RING"; "RNG"}*/
/*"SFORT" -> {"LMODULE"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"}*/
/*"SFORT" -> {"ALGEBRA"; "MODULE"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"}*/
/*"SFORT" -> {"PID"; "GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"}*/
/*"SFORT" -> {"DIVRING"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"SFORT" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"SFORT" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"}*/

"SOLVESER" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SOLVESER"]
/*"SOLVESER" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SOLVESER" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SOLVESER" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SOLVESER" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "SYMBOL"}*/
/*"SOLVESER" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"SOLVESER" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"SOLVESER" -> {"FLAGG-"; "LNAGG-"}*/
"SOLVESER" -> "FS"
/*"SOLVESER" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"SOLVESER" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"SOLVESER" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"SOLVESER" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"}*/
/*"SOLVESER" -> {"FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"}*/
/*"SOLVESER" -> {"STEP"; "NNI"; "VECTOR"; "IVECTOR"; "IARRAY1"; "ILIST"}*/
/*"SOLVESER" -> {"PI"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"}*/
/*"SOLVESER" -> {"HOAGG"; "AGG"; "ELTAGG"; "CLAGG"}*/

"SOLVETRA" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SOLVETRA"]
/*"SOLVETRA" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "EUCDOM"; "PID"}*/
/*"SOLVETRA" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SOLVETRA" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"SOLVETRA" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"SOLVETRA" -> {"ENTIRER"; "RETRACT"; "LINEXP"; "CHARZ"; "INT"; "LIST"}*/
/*"SOLVETRA" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SOLVETRA" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"}*/

```

```

/*"SOLVETRA" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"}*/
/*"SOLVETRA" -> {"OM"; "NNI"; "QFCAT"; "FIELD"; "UFD"; "DIVRING"; "FEVALAB"}*/
/*"SOLVETRA" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "PATAB"}*/
/*"SOLVETRA" -> {"FPATMAB"; "PATMAB"; "STEP"; "OINTDOM"; "ORDRING"}*/
/*"SOLVETRA" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "CHARNZ"}*/
/*"SOLVETRA" -> {"PFECAT"; "BOOLEAN"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"SOLVETRA" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"SOLVETRA" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "UPOLYC"; "POLYCAT"; "FAMR"}*/
/*"SOLVETRA" -> {"AMR"; "FRETRACT"}*/
"SOLVETRA" -> "FS"
/*"SOLVETRA" -> {"ES"; "GROUP"; "LSAGG-"; "STAGG-"; "CACHSET"; "PI"; "ACFS"}*/
/*"SOLVETRA" -> {"ACF"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"SOLVETRA" -> {"AHYP"; "ELEMFUN"; "COMBOPC"; "CFCAT"; "LFCAT"; "PRIMCAT"}*/
/*"SOLVETRA" -> {"SPFCAT"; "ELAGG-"; "URAGG-"; "FPS"; "RNS"; "INTCAT"}*/
/*"SOLVETRA" -> {"COMPCAT"; "MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"}*/
/*"SOLVETRA" -> {"FFIELDC"; "FPC"}*/

"SUMFS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SUMFS"]
/*"SUMFS" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"SUMFS" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SUMFS" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"SUMFS" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"; "RETRACT"; "LINEXP"}*/
"SUMFS" -> "FS"
/*"SUMFS" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"SUMFS" -> {"TYPE"; "PATMAB"; "FRETRACT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"SUMFS" -> {"CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"SUMFS" -> {"UFD"; "DIVRING"; "COMBOPC"; "CFCAT"}*/
"SUMFS" -> "ACF"
/*"SUMFS" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"SUMFS" -> {"ELEMFUN"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"SUMFS" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"SUMFS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"SUMFS" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"SUMFS" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "CACHSET"; "ILIST"; "BOOLEAN"}*/

"SUTS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SUTS"]
/*"SUTS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SUTS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"SUTS" -> "UTSCAT"
/*"SUTS" -> {"UPSCAT"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"SUTS" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"SUTS" -> {"ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"SUTS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "INT"; "BOOLEAN"}*/
/*"SUTS" -> {"NNI"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"; "PID"; "OINTDOM"}*/
/*"SUTS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"SUTS" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"SUTS" -> {"STEP"; "OM"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"}*/
/*"SUTS" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "FIELD"; "DIVRING"; "OAMONS"}*/

"TOOLSIGN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TOOLSIGN"]
/*"TOOLSIGN" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"TOOLSIGN" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"TOOLSIGN" -> {"LMODULE"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"TOOLSIGN" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/

```

```

/*"TOOLSIGN" -> {"EUCDOM"; "PID"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"TOOLSIGN" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"; "KONVERT"}*/
/*"TOOLSIGN" -> {"RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"TOOLSIGN" -> {"CHARZ"; "STEP"}*/
"TOOLSIGN" -> "FS"
/*"TOOLSIGN" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"TOOLSIGN" -> {"FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"; "FIELD"}*/
/*"TOOLSIGN" -> {"DIVRING"; "OM"; "INT"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"TOOLSIGN" -> {"GCDDOM-"; "INTDOM-"; "ALGEBRA-"; "DIFRING-"; "ORDRING-"}*/
/*"TOOLSIGN" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"}*/
/*"TOOLSIGN" -> {"PRIMARR"; "A1AGG-"; "ISTRING"}*/

"TRIGMNIP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TRIGMNIP"]
/*"TRIGMNIP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"TRIGMNIP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"TRIGMNIP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"TRIGMNIP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"TRIGMNIP" -> {"RETRACT"; "LINEXP"}*/
"TRIGMNIP" -> "ACF"
/*"TRIGMNIP" -> {"FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"TRIGMNIP" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"TRIGMNIP" -> "FS"
/*"TRIGMNIP" -> {"ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"TRIGMNIP" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"TRIGMNIP" -> {"CHARZ"; "CHARNZ"; "INT"; "LIST"; "ILIST"}*/
"TRIGMNIP" -> "COMPCAT"
/*"TRIGMNIP" -> {"MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "DIFEXT"}*/
/*"TRIGMNIP" -> {"DIFRING"; "FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"}*/
/*"TRIGMNIP" -> {"PFECAT"; "OM"; "SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"}*/
/*"TRIGMNIP" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"TRIGMNIP" -> {"FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"TRIGMNIP" -> {"INS-"; "NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"TRIGMNIP" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"TRIGMNIP" -> {"ELAGG"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "BOOLEAN"}*/

"TRMANIP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=TRMANIP"]
/*"TRMANIP" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "GCDDOM"; "INTDOM"}*/
/*"TRMANIP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"TRMANIP" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"TRMANIP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
"TRMANIP" -> "FS"
/*"TRMANIP" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"TRMANIP" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"TRMANIP" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"TRMANIP" -> {"PID"; "UFD"; "DIVRING"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"TRMANIP" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "SYMBOL"; "INT"; "REF"}*/
/*"TRMANIP" -> {"ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"TRMANIP" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"TRMANIP" -> {"LNAGG-"; "ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"TRMANIP" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"TRMANIP" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "NNI"; "LSAGG-"; "STAGG-"}*/
/*"TRMANIP" -> {"BOOLEAN"; "ELAGG-"; "URAGG-"; "CACHSET"; "POLYCAT"}*/
/*"TRMANIP" -> {"FAMR"; "AMR"; "PFECAT"}*/

```

```

"TSETCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=TSETCAT",
           shape=ellipse]
/*"TSETCAT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"TSETCAT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"TSETCAT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"TSETCAT" -> {"MODULE"; "ENTIRER"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"}*/
/*"TSETCAT" -> {"TYPE"; "EVALAB"; "IEVALAB"; "KONVERT"; "OAMONS"; "OCAMON"}*/
/*"TSETCAT" -> {"OAMON"; "OASGP"; "ORDSET"}*/
"TSETCAT" -> "RPOLCAT"
/*"TSETCAT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"TSETCAT" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"TSETCAT" -> {"GCDDOM"; "PFECAT"; "UFD"; "BOOLEAN"; "INT"; "LIST"}*/
/*"TSETCAT" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"TSETCAT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"}*/
/*"TSETCAT" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"TSETCAT" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "NNI"; "INS-"; "FINITE"}*/

"TSETCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=TSETCAT",
            shape=ellipse]
/*"TSETCAT-" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"TSETCAT-" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"TSETCAT-" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"TSETCAT-" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "PSETCAT"}*/
/*"TSETCAT-" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"TSETCAT-" -> {"KONVERT"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"TSETCAT-" -> "ORDSET"*/
"TSETCAT-" -> "RPOLCAT"
/*"TSETCAT-" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"TSETCAT-" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"TSETCAT-" -> {"GCDDOM"; "PFECAT"; "UFD"; "BOOLEAN"; "INT"; "LIST"}*/
/*"TSETCAT-" -> {"ILIST"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"TSETCAT-" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"}*/
/*"TSETCAT-" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"TSETCAT-" -> {"LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "NNI"}*/
/*"TSETCAT-" -> {"INS-"; "FINITE"}*/

"UFPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UFPS"]
/*"UFPS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UFPS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"UFPS" -> "UTSCAT"
/*"UFPS" -> {"UPSCAT"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"UFPS" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"UFPS" -> {"ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"UFPS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "OAMONS"; "OCAMON"}*/
/*"UFPS" -> {"OAMON"; "OASGP"; "ORDSET"; "INS"; "UFD"; "GCDDOM"; "EUCDOM"}*/
/*"UFPS" -> {"PID"; "OINTDOM"; "ORDRING"; "OAGROUP"; "KONVERT"; "RETRACT"}*/
/*"UFPS" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"; "FIELD"; "DIVRING"}*/

"ULSCCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=ULSCCAT"]
/*"ULSCCAT" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"}*/
/*"ULSCCAT" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ULSCCAT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ULSCCAT" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"ULSCCAT" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/

```

```

/*"ULSCCAT" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"ULSCCAT" -> {"AHYP"; "ELEMFUN"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"ULSCCAT" -> {"UFD"; "DIVRING"; "RETRACT"; "QFCAT"; "FEVALAB"; "EVALAB"}*/
/*"ULSCCAT" -> {"IEVALAB"; "DIFEXT"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"ULSCCAT" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"}*/
/*"ULSCCAT" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ULSCCAT" -> {"OASGP"; "REAL"; "PFECAT"}*/
"ULSCCAT" -> "UTSCAT"
/*"ULSCCAT" -> {"INS"; "CFCAT"}*/

"ULSCCAT-" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ULSCCAT"]
/*"ULSCCAT-" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"}*/
/*"ULSCCAT-" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ULSCCAT-" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ULSCCAT-" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"ULSCCAT-" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"}*/
/*"ULSCCAT-" -> {"DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"ULSCCAT-" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "FIELD"}*/
/*"ULSCCAT-" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"ULSCCAT-" -> {"QFCAT"; "FEVALAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"ULSCCAT-" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"ULSCCAT-" -> {"TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"}*/
/*"ULSCCAT-" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"ULSCCAT-" -> {"REAL"; "PFECAT"}*/
"ULSCCAT-" -> "UTSCAT"
/*"ULSCCAT-" -> {"INS"; "CFCAT"}*/

"UPXSSING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UPXSSING"]
"UPXSSING" -> "ACF"
/*"UPXSSING" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"UPXSSING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPXSSING" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"UPXSSING" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"UPXSSING" -> {"ENTIRER"; "UFD"; "DIVRING"; "RADCAT"; "TRANFUN"}*/
/*"UPXSSING" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"UPXSSING" -> "FS"
/*"UPXSSING" -> {"ES"; "ORDSET"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"UPXSSING" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"}*/
/*"UPXSSING" -> {"GROUP"; "PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"}*/
/*"UPXSSING" -> {"FAMR"; "AMR"; "UPXSCCA"; "UPXSCAT"; "UPSCAT"; "PSCAT"}*/
/*"UPXSSING" -> {"ELTAB"; "DIFRING"; "NNI"; "INT"; "LIST"; "ILIST"; "INS"}*/
/*"UPXSSING" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"UPXSSING" -> {"OASGP"; "CFCAT"; "REAL"; "STEP"; "BOOLEAN"; "OM"}*/
/*"UPXSSING" -> {"LSAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"UPXSSING" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"UPXSSING" -> {"ELAGG"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"UPXSSING" -> {"A1AGG-"; "ISTRING"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PFECAT"}*/

"UTSODE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UTSODE"]
/*"UTSODE" -> {"ALGEBRA"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"UTSODE" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"UTSODE" -> {"MONOID"; "LMODULE"; "MODULE"; "BMODULE"; "RMODULE"}*/
"UTSODE" -> "UTSCAT"
/*"UTSODE" -> {"UPSCAT"; "PSCAT"; "AMR"; "COMRING"; "CHARZ"; "CHARNZ"}*/

```



```

/*"UTSODE" -> {"INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"}*/
/*"UTSODE" -> {"RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"UTSODE" -> {"ELEMFUN"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"UTSODE" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"UTSODE" -> {"EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"UTSODE" -> {"KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/

"UTSODETL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UTSODETL"]
/*"UTSODETL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UTSODETL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"UTSODETL" -> {"LMODULE"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"UTSODETL" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"UTSODETL" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "FRETRCT"}*/
/*"UTSODETL" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"UTSODETL" -> {"ORDSET"; "KONVERT"; "PATMAB"; "GCDDOM"; "PFECAT"}*/
/*"UTSODETL" -> {"UFD"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "EUCDOM"}*/
/*"UTSODETL" -> {"PID"; "FIELD"; "DIVRING"; "LODOCAT"; "OREPCAT"}*/
"UTSODETL" -> "UTSCAT"
/*"UTSODETL" -> {"UPSCAT"; "PSCAT"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"UTSODETL" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "NNI"; "INT"; "SINT"}*/
/*"UTSODETL" -> {"VECTOR"; "IVECTOR"; "IARRAY1"}*/

"UTSSOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UTSSOL"]
/*"UTSSOL" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"UTSSOL" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UTSSOL" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UTSSOL" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"UTSSOL" -> {"UFD"; "DIVRING"}*/
"UTSSOL" -> "UTSCAT"
/*"UTSSOL" -> {"UPSCAT"; "PSCAT"; "AMR"; "CHARZ"; "CHARNZ"; "ELTAB"}*/
/*"UTSSOL" -> {"DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"UTSSOL" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "NNI"; "INT"; "LSAGG"}*/
/*"UTSSOL" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"UTSSOL" -> {"IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"}*/
/*"UTSSOL" -> {"FLAGG"; "ORDSET"; "ELAGG"; "OM"; "UPOLYC"; "POLYCAT"}*/
/*"UTSSOL" -> {"FAMR"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"UTSSOL" -> {"PFECAT"; "DIFEXT"; "STEP"; "LZSTAGG"}*/

"UTS2" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UTS2"]
/*"UTS2" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UTS2" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"UTS2" -> "UTSCAT"
/*"UTS2" -> {"UPSCAT"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"; "COMRING"}*/
/*"UTS2" -> {"ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"}*/
/*"UTS2" -> {"ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"UTS2" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/

"WUTSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=WUTSET"]
/*"WUTSET" -> {"TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"WUTSET" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"WUTSET" -> {"KONVERT"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"WUTSET" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"WUTSET" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"WUTSET" -> {"OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/

```

```

"WUTSET" -> "RPOLCAT"
/*"WUTSET" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"WUTSET" -> {"FRETRACT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"WUTSET" -> {"GCDDOM"; "PFECAT"; "UFD"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"WUTSET" -> {"RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"}*/
/*"WUTSET" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"WUTSET" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"WUTSET" -> {"CLAGG-"; "BOOLEAN"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"WUTSET" -> {"SETCAT-"; "BASTYPE-"; "FINITE"}*/

```

1.4.20 Layer18

Depends on: ACFS EXPRSOL FDIVCAT RSETCAT UFPS ULSCCAT UTSSOL Used in
next layer: EXPRSOL SFRTCAT CELL

— layer18 —

```

LAYER18=\
  ${OUT}/CAD.o \
  ${OUT}/DEFINTEF.o ${OUT}/DEFINTRF.o ${OUT}/DFINTTLS.o ${OUT}/EFULS.o \
  ${OUT}/ESCONT.o ${OUT}/EXPR.o ${OUT}/EXPRSOL.o ${OUT}/EXPR2UPS.o \
  ${OUT}/FACTEXT.o \
  ${OUT}/FDIV.o ${OUT}/FSCINT.o ${OUT}/FSINT.o ${OUT}/FS2EXXP.o \
  ${OUT}/GSERIES.o ${OUT}/HELLFDIV.o ${OUT}/INTDIVP.o \
  ${OUT}/INVLAPLA.o ${OUT}/IR2F.o \
  ${OUT}/IRRF2F.o ${OUT}/LAPLACE.o ${OUT}/LIMITPS.o ${OUT}/LODEEF.o \
  ${OUT}/NODE1.o ${OUT}/NOTTING.o \
  ${OUT}/NTSCAT.o ${OUT}/ODECONST.o ${OUT}/ODEEF.o \
  ${OUT}/ODEINT.o ${OUT}/QCMACK.o ${OUT}/REGSET.o ${OUT}/REP.o \
  ${OUT}/RGCHAIN.o ${OUT}/RSDCMPK.o ${OUT}/SFRTCAT.o ${OUT}/SOLVERAD.o \
  ${OUT}/SULS.o ${OUT}/SUPXS.o ${OUT}/UFPS1.o ${OUT}/ULS.o \
  ${OUT}/ULSCONS.o ${OUT}/UPXS.o ${OUT}/UPXSCONS.o ${OUT}/UTS.o \
  ${OUT}/UTSZ.o \
  layer18done

```

— layerpic —

```

/* layer 18 */
/* depends on: ACFS FDIVCAT RSETCAT UFPS ULSCCAT UTSSOL CELL */

"CAD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=CAD"]
"CAD" -> "CELL"
/*"CAD" -> {"POLY"; "SUP"; "INT"; "NNI"; "SCCELL"; "RCFIELD" } */
/*"CAD" -> {"CHARZ"; "RING"; "RNG"; "ABELGRP"; "CABMON" } */
/*"CAD" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE" } */
/*"CAD" -> {"SGROUP"; "MONOID"; "LMODULE"; "ORDRING"; "OAGROUP" } */
/*"CAD" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "COMRING" } */
/*"CAD" -> {"BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM" } */

```

```

/*"CAD" -> {"INTDOM"; "ALGEBRA"; "MODULE"; "ENTIRER"; "LORER"; "UFD"} */
/*"CAD" -> {"DIVRING"; "FRETRCT"; "RETRACT"; "RADCAT"; "LIST"; "INT"} */
/*"CAD" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG" } */
/*"CAD" -> {"TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG" } */
/*"CAD" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ELAGG"; "OM" } */
/*"CAD" -> {"PATMAB"; "LIST"; "LSAGG-"; "STAGG-"; "ELAGG-" } */
/*"CAD" -> {"FLAGG-"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ" } */
/*"CAD" -> {"FLINEXP"; "LINEXP"; "PFECAT"; "CADU"; "SUBRESP" } */
/*"CAD" -> {"PRIMARR"; "UPOLYC"; "DIFRING"; "DIFEXT"; "STEP"; "SINT" } */
/*"CAD" -> {"A1AGG" } */

"DEFINTEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DEFINTEF"]
/*"DEFINTEF" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DEFINTEF" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DEFINTEF" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DEFINTEF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"DEFINTEF" -> {"ORDSET"; "CHARZ"; "RETRACT"; "LINEXP"; "TRANFUN"}*/
/*"DEFINTEF" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PRIMCAT"}*/
"DEFINTEF" -> "ACFS"
/*"DEFINTEF" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"DEFINTEF" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"DEFINTEF" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"DEFINTEF" -> {"CHARNZ"; "SPFCAT"; "BOOLEAN"; "CACHSET"; "SYMBOL"; "INT"}*/
/*"DEFINTEF" -> {"REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"DEFINTEF" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"DEFINTEF" -> {"LNAGG-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DEFINTEF" -> {"OAMON"; "OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"}*/
/*"DEFINTEF" -> {"OM"; "ILIST"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"}*/
/*"DEFINTEF" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"DEFINTEF" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"}*/

"DEFINTRF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DEFINTRF"]
/*"DEFINTRF" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"DEFINTRF" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"DEFINTRF" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"DEFINTRF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"DEFINTRF" -> {"ORDSET"; "CHARZ"; "RETRACT"; "LINEXP"; "FS"; "ES"}*/
/*"DEFINTRF" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"DEFINTRF" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"DEFINTRF" -> {"FIELD"; "UFD"; "DIVRING"; "BOOLEAN"; "POLYCAT"; "FAMR"}*/
/*"DEFINTRF" -> {"AMR"; "PFECAT"; "INT"; "LIST"; "ILIST"; "QFCAT"; "FEVALAB"}*/
/*"DEFINTRF" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "STEP"; "OINTDOM"; "ORDRING"}*/
/*"DEFINTRF" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
"DEFINTRF" -> "ACFS"
/*"DEFINTRF" -> {"ACF"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"DEFINTRF" -> {"AHYP"; "ELEMFUN"; "COMBOPC"; "CFCAT"; "LFCAT"; "PRIMCAT"}*/
/*"DEFINTRF" -> "SPFCAT"*/

"DFINTTLS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=DFINTTLS"]
/*"DFINTTLS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"DFINTTLS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"DFINTTLS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"DFINTTLS" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"DFINTTLS" -> {"RETRACT"; "LINEXP"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/

```

```

/*"DFINTTLS" -> {"HYPCAT"; "AHYP"; "ELEMFUN"}*/
"DFINTTLS" -> "ACFS"
/*"DFINTTLS" -> {"ACF"; "FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"}*/
/*"DFINTTLS" -> {"RADCAT"; "FS"; "ES"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"DFINTTLS" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"}*/
/*"DFINTTLS" -> {"GROUP"; "PDRING"; "FLINEXP"; "CHARZ"; "CHARNZ"; "NNI"}*/
/*"DFINTTLS" -> {"INT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"DFINTTLS" -> {"OAMON"; "OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"}*/
/*"DFINTTLS" -> {"OM"; "BOOLEAN"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"DFINTTLS" -> {"LIST"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SYMBOL"; "REF"}*/
/*"DFINTTLS" -> {"ALIST"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"; "POLYCAT"}*/
/*"DFINTTLS" -> {"FAMR"; "AMR"; "PFECAT"; "QFCAT"; "FEVALAB"; "ELTAB"}*/
/*"DFINTTLS" -> {"DIFEXT"; "LSAGG-"; "INS-"}*/

"EFULS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EFULS"]
/*"EFULS" -> "PTRANFN"*/
"EFULS" -> "ULSCCAT"
/*"EFULS" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"}*/
/*"EFULS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"EFULS" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"EFULS" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"EFULS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/
/*"EFULS" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"EFULS" -> {"AHYP"; "ELEMFUN"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"EFULS" -> {"UFD"; "DIVRING"; "RETRACT"; "QFCAT"; "FEVALAB"; "EVALAB"}*/
/*"EFULS" -> {"IEVALAB"; "DIFEXT"; "FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"}*/
/*"EFULS" -> {"FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"; "OINTDOM"}*/
/*"EFULS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"}*/
/*"EFULS" -> {"PFECAT"; "UTSCAT"; "NNI"; "INT"; "INS"; "CFCAT"; "PI"}*/
/*"EFULS" -> {"OM"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"}*/
/*"EFULS" -> {"PRIMARR"; "A1AGG-"; "ISTRING"}*/

"ESCONT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ESCONT"]
/*"ESCONT" -> {"FPS"; "RNS"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"ESCONT" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"ESCONT" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"ESCONT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"ESCONT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "ORDRING"; "OAGROUP"}*/
/*"ESCONT" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "REAL"; "KONVERT"}*/
/*"ESCONT" -> {"RETRACT"; "RADCAT"; "PATMAB"; "CHARZ"; "DIFRING"; "OM"}*/
/*"ESCONT" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"ESCONT" -> {"SPFCAT"; "DFLOAT"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"ESCONT" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"ESCONT" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "INT"}*/
/*"ESCONT" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"ESCONT" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "STRING"; "CHAR"}*/
/*"ESCONT" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "INS"}*/
/*"ESCONT" -> {"OINTDOM"; "LINEXP"; "CFCAT"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"ESCONT" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"; "CHARNZ"}*/
/*"ESCONT" -> {"PFECAT"; "FS"; "ES"; "FRETRCT"; "GROUP"; "NNI"; "SYMBOL"}*/
/*"ESCONT" -> {"REF"; "ALIST"; "SRAGG-"; "PI"; "VECTCAT"; "A1AGG"}*/
"ESCONT" -> "ACFS"
/*"ESCONT" -> {"ACF"; "COMBOPC"; "LFCAT"; "PRIMCAT"; "VECTOR"; "IVECTOR"}*/
/*"ESCONT" -> {"IARRAY1"; "VECTCAT-"}*/

```

```

"EXPR" [color="#88FF44",href="bookvol10.3.pdf#nameddest=EXPR"]
/*"EXPR" -> {"FS"; "ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"EXPR" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"EXPR" -> {"PATMAB"; "FRETRCT"; "MONOID"; "SGROUP"; "GROUP"; "ABELMON"}*/
/*"EXPR" -> {"ABELSG"; "ABELGRP"; "CABMON"; "RING"; "RNG"; "LMODULE"}*/
/*"EXPR" -> {"PDRING"; "FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "ALGEBRA"}*/
/*"EXPR" -> {"MODULE"; "BMODULE"; "RMODULE"; "FIELD"; "EUCDOM"; "PID"}*/
/*"EXPR" -> {"GCDDOM"; "INTDOM"; "COMRING"; "ENTIRER"; "UFD"; "DIVRING"}*/
"EXPR" -> "ACFS"
/*"EXPR" -> {"ACF"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"EXPR" -> {"AHYP"; "ELEMFUN"; "COMBOPC"; "CFCAT"; "LFCAT"; "PRIMCAT"}*/
/*"EXPR" -> {"SPFCAT"; "BOOLEAN"; "CACHSET"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"EXPR" -> {"PFECAT"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"EXPR" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"EXPR" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"EXPR" -> {"ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"}*/
/*"EXPR" -> {"ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"; "LSAGG"}*/
/*"EXPR" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"EXPR" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "NNI"}*/
/*"EXPR" -> {"PI"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"; "QFCAT"}*/
/*"EXPR" -> {"FEVALAB"; "DIFEXT"; "DIFRING"; "STEP"; "OINTDOM"; "ORDRING"}*/
/*"EXPR" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "REAL"; "UPOLYC"}*/
/*"EXPR" -> {"INS"; "FPS"; "RNS"; "LF"}*/

"EXPRSOL" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EXPRSOL"]
"EXPRSOL" -> "UTSSOL" /* by loadlib */
/*"EXPRSOL" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "INTDOM"}*/
/*"EXPRSOL" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"EXPRSOL" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"EXPRSOL" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "KONVERT"}*/
/*"EXPRSOL" -> {"FS"; "ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"}*/
/*"EXPRSOL" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"EXPRSOL" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"}*/
/*"EXPRSOL" -> {"PID"; "GCDDOM"; "UFD"; "DIVRING"; "UTSCAT"; "UPSCAT"}*/
/*"EXPRSOL" -> {"PSCAT"; "AMR"; "ELTAB"; "DIFRING"; "RADCAT"; "TRANFUN"}*/
/*"EXPRSOL" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "SYMBOL"}*/
/*"EXPRSOL" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"EXPRSOL" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"EXPRSOL" -> {"FLAGG-"; "LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"}*/

"EXPR2UPS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=EXPR2UPS"]
/*"EXPR2UPS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"EXPR2UPS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"EXPR2UPS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"EXPR2UPS" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"EXPR2UPS" -> {"RETRACT"; "LINEXP"; "ACF"; "FIELD"; "EUCDOM"; "PID"}*/
/*"EXPR2UPS" -> {"UFD"; "DIVRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"EXPR2UPS" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "FS"; "ES"; "IEVALAB"}*/
/*"EXPR2UPS" -> {"EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"}*/
/*"EXPR2UPS" -> {"FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARZ"; "CHARNZ"}*/
/*"EXPR2UPS" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"EXPR2UPS" -> {"OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"}*/
"EXPR2UPS" -> "ULSCCAT"

```

```

/*"EXPR2UPS" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "ELTAB"; "QFCAT"}*/
/*"EXPR2UPS" -> {"FEVALAB"; "DIFEXT"; "PFECAT"; "BOOLEAN"; "STRING"}*/
/*"EXPR2UPS" -> {"CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"EXPR2UPS" -> {"A1AGG-"; "ISTRING"; "NNI"; "ILIST"; "UPXSCCA"; "UPXSCAT"}*/

"FACTEXT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FACTEXT"]
"FACTEXT" -> "PACEXTC"
/*"FACTEXT" -> {"PACRATC"; "PACPERC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FACTEXT" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"FACTEXT" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"FACTEXT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"FACTEXT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARZ"; "RETRACT"}*/
/*"FACTEXT" -> {"XF"; "VSPACE"; "FPC"; "CHARNZ"; "FINITE"; "UPOLYC"}*/
/*"FACTEXT" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "FRETRCT"; "EVALAB"}*/
/*"FACTEXT" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"FACTEXT" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"FACTEXT" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FACTEXT" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"}*/
/*"FACTEXT" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"; "NNI"}*/

"FDIV" [color="#88FF44",href="bookvol10.3.pdf#nameddest=FDIV"]
"FDIV" -> "FDIVCAT"
/*"FDIV" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FDIV" -> {"BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"FDIV" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"FDIV" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FDIV" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"FDIV" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"FDIV" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"}*/
/*"FDIV" -> {"PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"FDIV" -> {"FFCAT"; "MONOGEN"; "FRAMALG"; "FINRALG"; "FINITE"; "FFIELD"}*/
/*"FDIV" -> {"FPC"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "VECTCAT-"}*/
/*"FDIV" -> {"A1AGG-"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"FDIV" -> {"OAMON"; "OASGP"; "CFCAT"; "REAL"; "OM"; "NNI"; "PI"; "VECTCAT"}*/
/*"FDIV" -> {"A1AGG"; "FLAGG"; "LNAGG"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"FDIV" -> {"ELTAGG"; "CLAGG"; "FLAGG-"; "LNAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"FDIV" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "QFCAT"; "FEVALAB"; "PATAB"}*/
/*"FDIV" -> "FPATMAB"*/

"FSCINT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSCINT"]
/*"FSCINT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"FSCINT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FSCINT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FSCINT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FSCINT" -> {"ORDSET"; "CHARZ"; "RETRACT"; "LINEXP"; "TRANFUN"}*/
/*"FSCINT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
"FSCINT" -> "ACFS"
/*"FSCINT" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"FSCINT" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"FSCINT" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"FSCINT" -> {"INT"; "LIST"; "ILIST"; "COMPCAT"; "MONOGEN"; "FRAMALG"}*/
/*"FSCINT" -> {"FINRALG"; "FINITE"; "DIFEXT"; "DIFRING"; "FFIELD"; "FPC"}*/
/*"FSCINT" -> {"STEP"; "FEVALAB"; "ELTAB"; "PFECAT"; "OM"; "LFCAT"}*/
/*"FSCINT" -> {"PRIMCAT"; "BOOLEAN"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/

```

```

/*"FSCINT" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"FSCINT" -> {"FLAGG"; "ELAGG"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"FSCINT" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "SYMBOL"}*/
/*"FSCINT" -> {"REF"; "ALIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"FSCINT" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/

"FSINT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FSINT"]
/*"FSINT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"FSINT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"FSINT" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"FSINT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"FSINT" -> {"ORDSET"; "CHARZ"; "RETRACT"; "LINEXP"; "TRANFUN"}*/
/*"FSINT" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PRIMCAT"}*/
"FSINT" -> "ACFS"
/*"FSINT" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"FSINT" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"FSINT" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"FSINT" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"FSINT" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"FSINT" -> {"FLAGG-"; "LNAGG-"; "NNI"; "ILIST"; "COMPCAT"; "MONOGEN"}*/
/*"FSINT" -> {"FRAMALG"; "FINRALG"; "FINITE"; "DIFEXT"; "DIFRING"}*/
/*"FSINT" -> {"FFIELDC"; "FPC"; "STEP"; "FEVALAB"; "ELTAB"; "PFECAT"}*/
/*"FSINT" -> {"OM"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"FSINT" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"FSINT" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"}*/
/*"FSINT" -> {"IXAGG-"; "CLAGG-"; "CACHSET"; "BOOLEAN"}*/

"FS2EXPPX" [color="#FF4488",href="bookvol10.4.pdf#nameddest=FS2EXPPX"]
/*"FS2EXPPX" -> {"ACF"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"FS2EXPPX" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"FS2EXPPX" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"FS2EXPPX" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"FS2EXPPX" -> {"ENTIRER"; "UFD"; "DIVRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"FS2EXPPX" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "FS"; "ES"; "ORDSET"}*/
/*"FS2EXPPX" -> {"RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"}*/
/*"FS2EXPPX" -> {"FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"}*/
/*"FS2EXPPX" -> {"FLINEXP"; "LINEXP"; "CHARZ"; "CHARNZ"; "PI"; "NNI"; "INT"}*/
/*"FS2EXPPX" -> {"INS"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"FS2EXPPX" -> {"OASGP"; "DIFRING"; "CFCAT"; "REAL"; "STEP"; "CACHSET"}*/
/*"FS2EXPPX" -> {"LIST"; "ILIST"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"FS2EXPPX" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"FS2EXPPX" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "BOOLEAN"; "QFCAT"; "FEVALAB"}*/
/*"FS2EXPPX" -> {"ELTAB"; "DIFEXT"; "PFECAT"; "UPXSCCA"; "UPXSCAT"}*/
/*"FS2EXPPX" -> {"UPSCAT"; "PSCAT"; "AMR"}*/
"FS2EXPPX" -> "ULSCCAT"
/*"FS2EXPPX" -> {"ULSCAT"; "INS-"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"FS2EXPPX" -> {"OM"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"FS2EXPPX" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"FS2EXPPX" -> {"ELAGG"; "STRICAT"; "SRAGG"; "A1AGG"}*/

"GSERIES" [color="#88FF44",href="bookvol10.3.pdf#nameddest=GSERIES"]
/*"GSERIES" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"GSERIES" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GSERIES" -> {"LMODULE"; "UPXSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "BMODULE"}*/

```

```

/*"GSERIES" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"GSERIES" -> {"INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"}*/
/*"GSERIES" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"GSERIES" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"GSERIES" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"}*/
/*"GSERIES" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SYMBOL"; "REF"; "ALIST"}*/
/*"GSERIES" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"GSERIES" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"GSERIES" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"GSERIES" -> {"ORDSET"; "ELAGG"; "OM"; "PATMAB"; "ILIST"; "LSAGG-"}*/
/*"GSERIES" -> {"STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "PRIMCAT"}*/
"GSERIES" -> "ACFS"
/*"GSERIES" -> {"ACF"; "FS"; "ES"; "RETRACT"; "PATAB"; "FPATMAB"; "FRETRCT"}*/
/*"GSERIES" -> {"GROUP"; "FLINEXP"; "LINEXP"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"GSERIES" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"GSERIES" -> {"STEP"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PFECAT"}*/

"HELLFDIV" [color="#88FF44",href="bookvol10.3.pdf#nameddest=HELLFDIV"]
"HELLFDIV" -> "FDIVCAT"
/*"HELLFDIV" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"HELLFDIV" -> {"BASTYPE"; "KOERCE"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"HELLFDIV" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "SGROUP"; "MONOID"}*/
/*"HELLFDIV" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"HELLFDIV" -> {"ENTIRER"; "UFD"; "DIVRING"; "UPOLYC"; "POLYCAT"; "PDRING"}*/
/*"HELLFDIV" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"HELLFDIV" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
/*"HELLFDIV" -> {"KONVERT"; "PATMAB"; "PFECAT"; "ELTAB"; "DIFRING"}*/
/*"HELLFDIV" -> {"DIFEXT"; "STEP"; "FFCAT"; "MONOGEN"; "FRAMALG"; "FINRALG"}*/
/*"HELLFDIV" -> {"FINITE"; "FFIELDC"; "FPC"; "INT"; "SYMBOL"; "REF"; "ALIST"}*/
/*"HELLFDIV" -> {"LIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"HELLFDIV" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"HELLFDIV" -> {"BOOLEAN"; "NNI"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"HELLFDIV" -> {"URAGG-"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"HELLFDIV" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"HELLFDIV" -> {"REAL"; "OM"; "VECTCAT"; "A1AGG"; "FLAGG"; "LNAGG"}*/
/*"HELLFDIV" -> {"IXAGG"; "HOAGG"; "AGG"; "ELTAGG"; "CLAGG"; "VECTOR"}*/
/*"HELLFDIV" -> {"IVECTOR"; "IARRAY1"; "INS"; "CFCAT"; "PI"}*/

"INTDIVP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INTDIVP"]
"INTDIVP" -> "DTP"
/*"INTDIVP" -> {"PRSPCAT"; "SETCATD"; "LOCPOWC"; "PLACESC"; "DIVCAT"}*/
/*"INTDIVP" -> {"INFCLCT"; "DSTRCAT"; "BLMETCT"; "PFORP"; "PARAMP"}*/
/*"INTDIVP" -> {"PRJALGPK"; "LPARSPT"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"INTDIVP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"INTDIVP" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INTDIVP" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"INTDIVP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"; "DIVRING"}*/
/*"INTDIVP" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"INTDIVP" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"INTDIVP" -> {"LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"INTDIVP" -> {"DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"; "ELTAGG"}*/
/*"INTDIVP" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"}*/
/*"INTDIVP" -> {"OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"; "UPSCAT"}*/
/*"INTDIVP" -> {"PSCAT"; "FAMONC"; "RCAGG"; "LSAGG"; "STAGG"; "URAGG"}*/

```



```

/*"INTDIVP" -> {"LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"INTDIVP" -> {"ILIST"; "LSAGG-"; "BOOLEAN"; "NNI"; "OUTFORM"}*/

"INVLAPLA" [color="#FF4488",href="bookvol10.4.pdf#nameddest=INVLAPLA"]
/*"INVLAPLA" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"INVLAPLA" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"INVLAPLA" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"INVLAPLA" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"INVLAPLA" -> {"ORDSET"; "CHARZ"; "RETRACT"; "LINEXP"; "TRANFUN"}*/
/*"INVLAPLA" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"INVLAPLA" -> {"PRIMCAT"; "SPFCAT"}*/
"INVLAPLA" -> "ACFS"
/*"INVLAPLA" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"INVLAPLA" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"INVLAPLA" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"INVLAPLA" -> {"CHARNZ"; "BOOLEAN"; "UPOLYC"; "POLYCAT"; "FAMR"; "AMR"}*/
/*"INVLAPLA" -> {"PFECAT"; "ELTAB"; "DIFRING"; "DIFEXT"; "STEP"; "LSAGG"}*/
/*"INVLAPLA" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"}*/
/*"INVLAPLA" -> {"IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"INVLAPLA" -> {"LIST"; "ILIST"; "NNI"; "CACHSET"; "PI"; "INS"; "OINTDOM"}*/
/*"INVLAPLA" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"INVLAPLA" -> {"CFCAT"; "REAL"}*/

"IR2F" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IR2F"]
/*"IR2F" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"IR2F" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"IR2F" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"IR2F" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"; "ORDSET"; "LINEXP"}*/
"IR2F" -> "ACFS"
/*"IR2F" -> {"ACF"; "FIELD"; "EUCDOM"; "PID"; "UFD"; "DIVRING"; "RADCAT"}*/
/*"IR2F" -> {"FS"; "ES"; "IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"IR2F" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"IR2F" -> {"CHARZ"; "CHARNZ"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"IR2F" -> {"AHYP"; "ELEMFUN"; "INT"; "LIST"; "ILIST"; "SYMBOL"; "REF"}*/
/*"IR2F" -> {"ALIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/*"IR2F" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG-"}*/
/*"IR2F" -> {"STAGG-"; "ELAGG-"; "URAGG-"; "INS-"; "BOOLEAN"; "INS"}*/
/*"IR2F" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"IR2F" -> {"DIFRING"; "CFCAT"; "REAL"; "STEP"; "NNI"; "PI"; "CACHSET"}*/
/*"IR2F" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "ELTAB"; "DIFEXT"}*/
/*"IR2F" -> {"OM"; "VECTOR"; "IVECTOR"; "IARRAY1"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"IR2F" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"IR2F" -> {"FLAGG"; "ELAGG"}*/

"IRRF2F" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IRRF2F"]
/*"IRRF2F" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"IRRF2F" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"IRRF2F" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"IRRF2F" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "RETRACT"; "ORDSET"}*/
/*"IRRF2F" -> {"LINEXP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"IRRF2F" -> {"CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"IRRF2F" -> {"KONVERT"; "PATMAB"; "PFECAT"; "UFD"; "FS"; "ES"; "PATAB"}*/
/*"IRRF2F" -> {"FPATMAB"; "TYPE"; "GROUP"; "FIELD"; "EUCDOM"; "PID"}*/
/*"IRRF2F" -> {"DIVRING"; "QFCAT"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/

```

```

/*"IRRF2F" -> {"DIFRING"; "STEP"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"IRRF2F" -> {"OAMON"; "OASGP"; "REAL"}*/
"IRRF2F" -> "ACFS"
/*"IRRF2F" -> {"ACF"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"IRRF2F" -> {"AHYP"; "ELEMFUN"; "COMBOPC"; "CFCAT"; "LFCAT"; "PRIMCAT"}*/
/*"IRRF2F" -> {"SPFCAT"; "INT"; "LIST"; "ILIST"}*/

"LAPLACE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LAPLACE"]
/*"LAPLACE" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"LAPLACE" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"LAPLACE" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LAPLACE" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"LAPLACE" -> {"ORDSET"; "CHARZ"; "RETRACT"; "LINEXP"; "TRANFUN"; "TRIGCAT"}*/
/*"LAPLACE" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "PRIMCAT"}*/
"LAPLACE" -> "ACFS"
/*"LAPLACE" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"LAPLACE" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"LAPLACE" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"LAPLACE" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/
/*"LAPLACE" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"LAPLACE" -> {"FLAGG-"; "LNAGG-"; "NNI"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"LAPLACE" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"LAPLACE" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ILIST"; "LSAGG-"}*/
/*"LAPLACE" -> {"BOOLEAN"; "STAGG-"; "ELAGG-"; "URAGG-"; "UPOLYC"; "POLYCAT"}*/
/*"LAPLACE" -> {"FAMR"; "AMR"; "PFECAT"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"LAPLACE" -> {"CACHSET"; "PI"}*/

"LIMITPS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LIMITPS"]
/*"LIMITPS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LIMITPS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LIMITPS" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"LIMITPS" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDSET"}*/
/*"LIMITPS" -> {"RETRACT"; "LINEXP"; "ACF"; "FIELD"; "EUCDOM"; "PID"}*/
/*"LIMITPS" -> {"UFD"; "DIVRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"}*/
/*"LIMITPS" -> {"HYPCAT"; "AHYP"; "ELEMFUN"; "FS"; "ES"; "IEVALAB"; "EVALAB"}*/
/*"LIMITPS" -> {"PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "FRETRCT"}*/
/*"LIMITPS" -> {"GROUP"; "PDRING"; "FLINEXP"; "CHARZ"; "CHARNZ"; "LSAGG"}*/
/*"LIMITPS" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"LIMITPS" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"LIMITPS" -> {"LIST"; "ILIST"; "BOOLEAN"; "SYMBOL"; "REF"; "ALIST"}*/
/*"LIMITPS" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"LIMITPS" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"; "PI"; "INS"}*/
/*"LIMITPS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"LIMITPS" -> {"DIFRING"; "CFCAT"; "REAL"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"LIMITPS" -> {"DIFEXT"; "PFECAT"; "UPXSCCA"; "UPXSCAT"; "UPSCAT"}*/
/*"LIMITPS" -> {"PSCAT"; "AMR"}*/
"LIMITPS" -> "ULSCCAT"
/*"LIMITPS" -> {"ULSCAT"; "INS-"}*/

"LODEEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LODEEF"]
/*"LODEEF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "EUCDOM"; "PID"}*/
/*"LODEEF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LODEEF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"LODEEF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/

```

```

/*"LODEEF" -> {"RETRACT"; "LINEXP"; "CHARZ"}*/
"LODEEF" -> "ACFS"
/*"LODEEF" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"LODEEF" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"LODEEF" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"LODEEF" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"LODEEF" -> {"PRIMCAT"; "LODOCAT"; "OREPCAT"; "ELTAB"; "CACHSET"}*/
/*"LODEEF" -> {"POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "NNI"; "INT"; "LSAGG"}*/
/*"LODEEF" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"LODEEF" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"}*/
/*"LODEEF" -> {"BOOLEAN"; "UPOLYC"; "DIFRING"; "DIFEXT"; "STEP"; "QFCAT"}*/
/*"LODEEF" -> {"FEVALAB"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"LODEEF" -> {"OAMON"; "OASGP"; "REAL"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"LODEEF" -> {"FLAGG-"; "URAGG-"; "VECTOR"; "IVECTOR"; "IARRAY1"}*/
/*"LODEEF" -> {"INS"; "CFCAT"; "VECTCAT"; "A1AGG"}*/

"NODE1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NODE1"]
/*"NODE1" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "EUCDOM"; "PID"}*/
/*"NODE1" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NODE1" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"NODE1" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"NODE1" -> {"RETRACT"; "LINEXP"; "CHARZ"}*/
"NODE1" -> "ACFS"
/*"NODE1" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"NODE1" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"NODE1" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"NODE1" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"NODE1" -> {"PRIMCAT"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"NODE1" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"NODE1" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "CACHSET"; "ILIST"; "LSAGG"}*/
/*"NODE1" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"NODE1" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "POLYCAT"}*/
/*"NODE1" -> {"FAMR"; "AMR"; "PFECAT"; "NNI"; "PI"; "LSAGG-"; "STAGG-"}*/

"NOTTING" [color="#88FF44",href="bookvol10.3.pdf#nameddest=NOTTING"]
/*"NOTTING" -> {"GROUP"; "MONOID"; "SGROUP"; "SETCAT"; "BASTYPE"} */
/*"NOTTING" -> {"KOERCE"; "FFIELDC"; "FPC"} */
/* "NOTTING" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"} */
/* "NOTTING" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"} */
/* "NOTTING" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"} */
/* "NOTTING" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"} */
/* "NOTTING" -> {"DIFRING"; "NNI"; "INT"} */
"NOTTING" -> "UFPS"

"NTSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=NTSCAT"]
"NTSCAT" -> "RSETCAT"
/*"NTSCAT" -> {"TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"NTSCAT" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"NTSCAT" -> "KONVERT"*/

"ODECONST" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODECONST"]
/*"ODECONST" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "EUCDOM"; "PID"}*/
/*"ODECONST" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ODECONST" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/

```

```

/*"ODECONST" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"ODECONST" -> {"ENTIRER"; "RETRACT"; "LINEXP"; "CHARZ"}*/
"ODECONST" -> "ACFS"
/*"ODECONST" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"ODECONST" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"ODECONST" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"ODECONST" -> {"CHARNZ"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"}*/
/*"ODECONST" -> {"ELEMFUN"; "PRIMCAT"; "LODOCAT"; "OREPCAT"; "ELTAB"}*/
/*"ODECONST" -> {"BOOLEAN"; "INT"; "LIST"; "ILIST"; "UPOLYC"; "POLYCAT"}*/
/*"ODECONST" -> {"FAMR"; "AMR"; "PFECAT"; "DIFRING"; "DIFEXT"; "STEP"}*/
/*"ODECONST" -> {"SINT"; "NNI"}*/

"ODEEF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODEEF"]
/*"ODEEF" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "EUCDOM"; "PID"}*/
/*"ODEEF" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ODEEF" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ODEEF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ODEEF" -> {"RETRACT"; "LINEXP"; "CHARZ"}*/
"ODEEF" -> "ACFS"
/*"ODEEF" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"ODEEF" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"ODEEF" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"ODEEF" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"ODEEF" -> {"PRIMCAT"; "INT"; "VECTOR"; "IVECTOR"; "IARRAY1"; "SINT"}*/
/*"ODEEF" -> {"NNI"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"}*/
/*"ODEEF" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"ODEEF" -> {"ELAGG"; "OM"; "LIST"; "ILIST"; "BOOLEAN"; "VECTCAT"; "A1AGG"}*/
/*"ODEEF" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"ODEEF" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"}*/
/*"ODEEF" -> {"CACHSET"; "LSAGG-"; "STAGG-"; "ELAGG-"; "PI"; "POLYCAT"}*/
/*"ODEEF" -> {"FAMR"; "AMR"; "PFECAT"}*/

"ODEINT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ODEINT"]
/*"ODEINT" -> {"ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "EUCDOM"; "PID"}*/
/*"ODEINT" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"ODEINT" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ODEINT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ODEINT" -> {"RETRACT"; "LINEXP"; "CHARZ"}*/
"ODEINT" -> "ACFS"
/*"ODEINT" -> {"ACF"; "FIELD"; "UFD"; "DIVRING"; "RADCAT"; "FS"; "ES"}*/
/*"ODEINT" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"ODEINT" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "CHARNZ"}*/
/*"ODEINT" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"ODEINT" -> {"PRIMCAT"; "INT"; "LIST"; "ILIST"; "INS"; "OINTDOM"}*/
/*"ODEINT" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "DIFRING"}*/
/*"ODEINT" -> {"CFCAT"; "REAL"; "STEP"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"ODEINT" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"}*/
/*"ODEINT" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LSAGG-"; "STAGG-"}*/
/*"ODEINT" -> {"ELAGG-"; "CACHSET"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"ODEINT" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"ODEINT" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "NNI"}*/

"QCMPACK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=QCMPACK"]
/*"QCMPACK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/

```

```

/"QCMACK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/"QCMACK" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/"QCMACK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"}*/
/"QCMACK" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"}*/
/"QCMACK" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/"QCMACK" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/"QCMACK" -> {"KONVERT"; "PATMAB"; "PFECAT"; "UFD"}*/
"QCMACK" -> "RSETCAT"
/"QCMACK" -> {"TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/"QCMACK" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "LSAGG"}*/
/"QCMACK" -> {"STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/"QCMACK" -> {"ELTAB"; "FLAGG"; "ELAGG"; "OM"; "ELAGG-"; "FLAGG-"}*/
/"QCMACK" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/"QCMACK" -> {"ISTRING"; "NNI"; "BOOLEAN"; "URAGG-"; "LNAGG-"}*/
/"QCMACK" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"}*/

"REGSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=REGSET"]
"REGSET" -> "RSETCAT"
/"REGSET" -> {"TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/"REGSET" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/"REGSET" -> {"KONVERT"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/"REGSET" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/"REGSET" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/"REGSET" -> {"ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/"REGSET" -> {"RPOLCAT"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/"REGSET" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/"REGSET" -> {"PFECAT"; "UFD"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/"REGSET" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"}*/
/"REGSET" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/"REGSET" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"; "BOOLEAN"; "INS-"}*/
/"REGSET" -> {"CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"}*/
/"REGSET" -> {"BASTYPE-"; "STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"}*/
/"REGSET" -> {"A1AGG-"; "ISTRING"; "NNI"; "FINITE"}*/

"REP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=REP"]
/"REP" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/"REP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/"REP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/"REP" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"}*/
/"REP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/"REP" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"}*/
/"REP" -> {"REAL"; "CHARZ"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/"REP" -> {"CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "PFECAT"}*/
/"REP" -> {"QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"; "DIFEXT"}*/
/"REP" -> {"PATAB"; "FPATMAB"; "TYPE"; "FS"; "ES"; "GROUP"; "OM"; "NNI"}*/
/"REP" -> {"INT"; "SINT"; "SYMBOL"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/"REP" -> {"CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/"REP" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"}*/
"REP" -> "ACFS"
/"REP" -> {"ACF"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/"REP" -> {"AHYP"; "ELEMFUN"; "COMBOPC"; "LFCAT"; "PRIMCAT"; "SPFCAT"}*/
/"REP" -> {"ILIST"; "MATCAT"; "ARR2CAT"; "HOAGG"; "AGG"; "PI"; "LSAGG"}*/
/"REP" -> {"STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/"REP" -> {"FLAGG"; "ELAGG"}*/

```

```

"RGCHAIN" [color="#88FF44",href="bookvol10.3.pdf#nameddest=RGCHAIN"]
"RGCHAIN" -> "RSETCAT"
/*"RGCHAIN" -> {"TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RGCHAIN" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"RGCHAIN" -> {"KONVERT"; "ORDFIN"; "ORDSET"; "FINITE"; "GCDDOM"; "INTDOM"}*/
/*"RGCHAIN" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"RGCHAIN" -> {"ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RGCHAIN" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "RPOLCAT"}*/
/*"RGCHAIN" -> {"POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"}*/
/*"RGCHAIN" -> {"FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"; "PATMAB"}*/
/*"RGCHAIN" -> {"PFECAT"; "UFD"}*/

"RSDCMPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RSDCMPK"]
/*"RSDCMPK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"RSDCMPK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"RSDCMPK" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RSDCMPK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"}*/
/*"RSDCMPK" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"}*/
/*"RSDCMPK" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"RSDCMPK" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"RSDCMPK" -> {"KONVERT"; "PATMAB"; "PFECAT"; "UFD"}*/
"RSDCMPK" -> "RSETCAT"
/*"RSDCMPK" -> {"TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"RSDCMPK" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"; "IXAGG"}*/
/*"RSDCMPK" -> {"ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"RSDCMPK" -> {"ILIST"; "LSAGG-"; "NNI"; "STAGG-"; "ELAGG-"; "BOOLEAN"}*/
/*"RSDCMPK" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"RSDCMPK" -> {"ISTRING"; "FLAGG-"}*/

"SFRTCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SFRTCAT"]
"SFRTCAT" -> "RSETCAT"
/*"SFRTCAT" -> {"TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SFRTCAT" -> {"CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"SFRTCAT" -> "KONVERT"*/

"SOLVERAD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SOLVERAD"]
/*"SOLVERAD" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"SOLVERAD" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"SOLVERAD" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SOLVERAD" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"SOLVERAD" -> {"ORDSET"; "CHARZ"; "BOOLEAN"; "FS"; "ES"; "RETRACT"}*/
/*"SOLVERAD" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"}*/
/*"SOLVERAD" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"SOLVERAD" -> {"LINEXP"; "CHARNZ"; "FIELD"; "UFD"; "DIVRING"}*/
"SOLVERAD" -> "ACFS"
/*"SOLVERAD" -> {"ACF"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"SOLVERAD" -> {"AHYP"; "ELEMFUN"; "COMBOPC"; "CFCAT"; "LFCAT"; "PRIMCAT"}*/
/*"SOLVERAD" -> {"SPFCAT"; "SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"}*/
/*"SOLVERAD" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"SOLVERAD" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "POLYCAT"}*/
/*"SOLVERAD" -> {"FAMR"; "AMR"; "PFECAT"; "NNI"; "ILIST"; "LSAGG-"}*/
/*"SOLVERAD" -> {"STAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"SOLVERAD" -> {"AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"}*/

```

```

/*"SOLVERAD" -> {"FLAGG"; "ELAGG"; "OM"; "ELAGG-"; "PI"}*/

"SULS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SULS"]
/*"SULS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SULS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"SULS" -> "ULSCCAT"
/*"SULS" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"SULS" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"SULS" -> {"ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"}*/
/*"SULS" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "FIELD"}*/
/*"SULS" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"SULS" -> {"QFCAT"; "FEVALAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "FLINEXP"}*/
/*"SULS" -> {"LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"}*/
/*"SULS" -> {"STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"SULS" -> {"OAMON"; "OASGP"; "REAL"; "PFECAT"; "INT"; "NNI"; "BOOLEAN"}*/
/*"SULS" -> {"POLYCAT"; "FAMR"; "FRETRCT"; "INS"; "CFCAT"; "UTSCAT"}*/
/*"SULS" -> {"OAMONS"; "FPS"; "RNS"; "UPOLYC"; "OM"}*/

"SUPXS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SUPXS"]
/*"SUPXS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"SUPXS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"SUPXS" -> {"UPXScca"; "UPXScat"; "UPSCAT"; "PSCAT"; "AMR"; "BMODULE"}*/
/*"SUPXS" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"SUPXS" -> {"INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"}*/
/*"SUPXS" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"SUPXS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"}*/
/*"SUPXS" -> "RETRACT"*/
"SUPXS" -> "ULSCCAT"
/*"SUPXS" -> {"ULSCAT"; "QFCAT"; "FEVALAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"SUPXS" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"SUPXS" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"SUPXS" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "PFECAT"; "INS"; "CFCAT"}*/
/*"SUPXS" -> {"INT"; "NNI"; "OM"}*/

"UFPS1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=UFPS1"]
"UFPS1" -> "UFPS" /* imported by macro */
/*"UFPS1" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UFPS1" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"UFPS1" -> "LMODULE"*/

"ULS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ULS"]
/*"ULS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"ULS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
"ULS" -> "ULSCCAT"
/*"ULS" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"ULS" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"ULS" -> {"ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"}*/
/*"ULS" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "FIELD"}*/
/*"ULS" -> {"EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
/*"ULS" -> {"QFCAT"; "FEVALAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "FLINEXP"}*/
/*"ULS" -> {"LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"}*/
/*"ULS" -> {"STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"}*/
/*"ULS" -> {"OAMON"; "OASGP"; "REAL"; "PFECAT"; "INT"; "UTSCAT"; "OAMONS"}*/
/*"ULS" -> {"FPS"; "RNS"; "INS"; "CFCAT"; "UPOLYC"; "POLYCAT"; "FAMR"}*/

```

```

/*"ULS" -> {"FRETRCT"; "OM"}*/

"ULSCONS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ULSCONS"]
"ULSCONS" -> "ULSCCAT"
/*"ULSCONS" -> {"ULSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"}*/
/*"ULSCONS" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"ULSCONS" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ULSCONS" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/
/*"ULSCONS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/
/*"ULSCONS" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"ULSCONS" -> {"AHYP"; "ELEMFUN"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"ULSCONS" -> {"UFD"; "DIVRING"; "RETRACT"; "QFCAT"; "FEVALAB"; "EVALAB"}*/
/*"ULSCONS" -> {"IEVALAB"; "DIFEXT"; "FLINEXP"; "LINEXP"; "PATAB"}*/
/*"ULSCONS" -> {"KONVERT"; "FPATMAB"; "TYPE"; "PATMAB"; "STEP"; "ORDSET"}*/
/*"ULSCONS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"ULSCONS" -> {"OASGP"; "REAL"; "PFECAT"; "UTSCAT"; "INT"; "NNI"; "BOOLEAN"}*/
/*"ULSCONS" -> {"INS-"; "EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"ULSCONS" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"ULSCONS" -> {"OAMONS"; "POLYCAT"; "FAMR"; "FRETRCT"; "ABELMON-"}*/
/*"ULSCONS" -> {"SYMBOL"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"ULSCONS" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"ULSCONS" -> {"FLAGG-"; "LNAGG-"; "INS"; "CFCAT"; "LSAGG"; "STAGG"}*/
/*"ULSCONS" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"ULSCONS" -> {"ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ILIST"; "LSAGG-"}*/
/*"ULSCONS" -> {"STAGG-"; "ELAGG-"; "URAGG-"; "RCAGG-"; "IXAGG-"; "PRIMCAT"}*/
"ULSCONS" -> "ACFS"
/*"ULSCONS" -> {"ACF"; "FS"; "ES"; "GROUP"; "FPS"; "RNS"; "UPOLYC"}*/

"UPXS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UPXS"]
/*"UPXS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UPXS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UPXS" -> {"UPXSCCA"; "UPXS CAT"; "UPSCAT"; "PSCAT"; "AMR"; "BMODULE"}*/
/*"UPXS" -> {"RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"}*/
/*"UPXS" -> {"INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"}*/
/*"UPXS" -> {"TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"}*/
/*"UPXS" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "UFD"; "DIVRING"; "RETRACT"}*/
"UPXS" -> "ULSCCAT"
/*"UPXS" -> {"ULSCAT"; "QFCAT"; "FEVALAB"; "EVALAB"; "IEVALAB"; "DIFEXT"}*/
/*"UPXS" -> {"FLINEXP"; "LINEXP"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"UPXS" -> {"PATMAB"; "STEP"; "ORDSET"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"UPXS" -> {"OCAMON"; "OAMON"; "OASGP"; "REAL"; "PFECAT"; "INS"; "CFCAT"}*/
/*"UPXS" -> {"INT"; "INS-"; "NNI"; "PI"}*/
/*"UPXS" -> "BOOLEAN"*/
/*"UPXS" -> {"LIST"; "ILIST"; "SINT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"UPXS" -> {"HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"}*/
/*"UPXS" -> {"ELAGG"; "OM"; "LSAGG-"; "SYMBOL"; "REF"; "ALIST"; "STRING"}*/
/*"UPXS" -> {"CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"UPXS" -> {"FLAGG-"; "LNAGG-"}*/

"UPXSCONS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UPXSCONS"]
/*"UPXSCONS" -> {"UPXSCCA"; "UPXS CAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"}*/
/*"UPXSCONS" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"UPXSCONS" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UPXSCONS" -> {"BMODULE"; "RMODULE"; "COMRING"; "ALGEBRA"; "MODULE"}*/

```



```

/*"UPXSCONS" -> {"CHARZ"; "CHARNZ"; "INTDOM"; "ENTIRER"; "ELTAB"; "DIFRING"}*/
/*"UPXSCONS" -> {"PDRING"; "RADCAT"; "TRANFUN"; "TRIGCAT"; "ATRIG"; "HYPCAT"}*/
/*"UPXSCONS" -> {"AHYP"; "ELEMFUN"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"UPXSCONS" -> {"UFD"; "DIVRING"; "RETRACT"; "ULSCAT"; "INS"; "OINTDOM"}*/
/*"UPXSCONS" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"UPXSCONS" -> {"KONVERT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"}*/
/*"UPXSCONS" -> {"OM"; "INT"; "NNI"; "PI"; "INS-"; "EUCDOM-"; "UFD-"}*/
/*"UPXSCONS" -> {"GCDDOM-"; "SYMBOL"; "REF"; "ALIST"; "LIST"; "STRING"}*/
/*"UPXSCONS" -> {"CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"UPXSCONS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"UPXSCONS" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"UPXSCONS" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"UPXSCONS" -> {"ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/
/*"UPXSCONS" -> {"RCAGG-"; "IXAGG-"; "PRIMCAT"}*/
"UPXSCONS" -> "ACFS"
/*"UPXSCONS" -> {"ACF"; "FS"; "ES"; "PATAB"; "FPATMAB"; "FRETRACT"; "GROUP"}*/
/*"UPXSCONS" -> {"FLINEXP"; "QFCAT"; "FEVALAB"; "DIFEXT"; "PFECAT"}*/

"UTS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UTS"]
/*"UTS" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"UTS" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"UTS" -> {"UTSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "BMODULE"; "RMODULE"}*/
/*"UTS" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"UTS" -> {"ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"}*/
/*"UTS" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "NNI"; "INT"}*/
/*"UTS" -> {"BOOLEAN"; "SINT"; "PI"; "SYMBOL"; "REF"; "ALIST"; "LIST"}*/
/*"UTS" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"UTS" -> {"SRAGG-"; "FLAGG-"; "LNAGG-"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"UTS" -> {"UFD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"UTS" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "KONVERT"; "RETRACT"}*/
/*"UTS" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"; "QFCAT"}*/
/*"UTS" -> {"FEVALAB"; "EVALAB"; "IEVALAB"; "DIFEXT"; "FLINEXP"; "PATAB"}*/
/*"UTS" -> {"FPATMAB"; "TYPE"; "PFECAT"; "OM"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"UTS" -> {"RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "CLAGG"}*/
/*"UTS" -> {"FLAGG"; "ELAGG"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"UTS" -> {"URAGG-"; "RCAGG-"; "IXAGG-"; "PRIMCAT"}*/
"UTS" -> "ACFS"
/*"UTS" -> {"ACF"; "FS"; "ES"; "FRETRACT"; "GROUP"; "OAMONS"}*/

"UTSZ" [color="#88FF44",href="bookvol10.3.pdf#nameddest=UTSZ"]
/*"UTSZ" -> {"UTSCAT"; "UPSCAT"; "PSCAT"; "AMR"; "RING"; "RNG"; "ABELGRP"}*/
/*"UTSZ" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"UTSZ" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"UTSZ" -> {"COMRING"; "ALGEBRA"; "MODULE"; "CHARZ"; "CHARNZ"; "INTDOM"}*/
/*"UTSZ" -> {"ENTIRER"; "ELTAB"; "DIFRING"; "PDRING"; "RADCAT"; "TRANFUN"}*/
/*"UTSZ" -> {"TRIGCAT"; "ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "NNI"; "INT"}*/
/*"UTSZ" -> {"BOOLEAN"; "SINT"; "PI"; "SYMBOL"; "REF"; "ALIST"; "LIST"}*/
/*"UTSZ" -> {"STRING"; "CHAR"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"}*/
/*"UTSZ" -> {"SRAGG"; "FLAGG-"; "LNAGG-"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"UTSZ" -> {"UFD"; "DIVRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"UTSZ" -> {"OCAMON.o"; "OAMON"; "OASGP"; "ORDSET"; "KONVERT"; "RETRACT"}*/
/*"UTSZ" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "STEP"; "QFCAT"; "FEVALAB"}*/
/*"UTSZ" -> {"EVALAB"; "IEVALAB"; "DIFEXT"; "FLINEXP"; "PATAB"; "FPATMAB"}*/
/*"UTSZ" -> {"TYPE"; "PFECAT"; "OM"; "PRIMCAT"}*/

```

```
"UTSZ" -> "ACFS"
/*"UTSZ" -> {"ACF"; "FS"; "ES"; "FRETRCT"; "GROUP"; "ILIST"; "OAMONS"}*/
```

1.4.21 Layer19

Depends on: EXPRSOL SFRTCAT FACTEXT INTDIVP DTP

Next layer depends on: RECOP

— layer19 —

```
LAYER19=\
  ${OUT}/GPAFF.o \
  ${OUT}/IRURPK.o ${OUT}/LAZM3PK.o ${OUT}/LEXTRIPK.o ${OUT}/NORMPK.o \
  ${OUT}/PACEXT.o \
  ${OUT}/RECOP.o ${OUT}/RURPK.o ${OUT}/SFRGCD.o ${OUT}/SFQCMK.o \
  ${OUT}/SNTSCAT.o ${OUT}/SRDCMPK.o ${OUT}/SREGSET.o ${OUT}/ZDSOLVE.o \
  layer19done
```

— layerpic —

```
/* layer 19 */
/* EXPRSOL SFRTCAT */

"GPAFF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GPAFF"]
"GPAFF" -> "INTDIVP"
"GPAFF" -> "DTP"
/*"GPAFF" -> {"PRSPCAT"; "SETCATD"; "LOCPOWC"; "PLACESC"; "DIVCAT"}*/
/*"GPAFF" -> {"INFCLCT"; "DSTRCAT"; "BLMETCT"; "PACFFC"; "PACPERC"}*/
/*"GPAFF" -> {"PFORP"; "PLPKCRV"; "INTFRSP"; "PRJALGPK"; "PARAMP"; "LPARSPT"}*/
/*"GPAFF" -> {"UTSZ"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"GPAFF" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"GPAFF" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GPAFF" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"GPAFF" -> {"ENTIRER"; "UFD"; "DIVRING"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"GPAFF" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"GPAFF" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"}*/
/*"GPAFF" -> {"PFECAT"; "DIRPCAT"; "IXAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"GPAFF" -> {"ELTAGG"; "ELTAB"; "DIFEXT"; "DIFRING"; "FINITE"; "ORDRING"}*/
/*"GPAFF" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "OAMONS"; "VSPACE"}*/
/*"GPAFF" -> {"UPSCAT"; "PSCAT"; "FAMONC"; "RCAGG"; "BOOLEAN"; "INT"}*/
/*"GPAFF" -> {"LIST"; "ILIST"; "INS"; "OINTDOM"; "CFCAT"; "REAL"; "STEP"}*/
/*"GPAFF" -> {"LSAGG"; "STAGG"; "URAGG"; "LNAGG"; "CLAGG"; "FLAGG"; "ELAGG"}*/
/*"GPAFF" -> {"OM"; "NNI"; "LSAGG-"; "STAGG-"; "ORDFIN"; "LOGIC"; "ELAGG-"}*/
/*"GPAFF" -> {"FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/
/*"GPAFF" -> {"HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"; "SETCAT-"; "BASTYPE-"}*/
/*"GPAFF" -> {"PI"; "FFIELDC"; "FPC"; "MONOID-"; "ABELMON-"; "SGROUP-"}*/
/*"GPAFF" -> {"ABELSG-"; "SINT"; "OUTFORM"}*/
```

```

"IRURPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=IRURPK"]
/*"IRURPK" -> {"GCDDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"IRURPK" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"IRURPK" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"IRURPK" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"IRURPK" -> {"CHARZ"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"IRURPK" -> {"RPOLCAT"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARNZ"}*/
/*"IRURPK" -> {"FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"IRURPK" -> {"LINEXP"; "KONVERT"; "PATMAB"; "PFECAT"; "UFD"}*/
"IRURPK" -> "SFRTCAT"
/*"IRURPK" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"}*/
/*"IRURPK" -> {"TYPE"; "NNI"; "INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"IRURPK" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"}*/
/*"IRURPK" -> {"LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"}*/
/*"IRURPK" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "BOOLEAN"}*/

"LAZM3PK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LAZM3PK"]
/*"LAZM3PK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LAZM3PK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"LAZM3PK" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"; "RMODULE"}*/
/*"LAZM3PK" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"LAZM3PK" -> {"OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"LAZM3PK" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"LAZM3PK" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"LAZM3PK" -> {"PFECAT"; "UFD"; "RSETCAT"; "TSETCAT"; "PSETCAT"; "CLAGG"}*/
/*"LAZM3PK" -> {"HOAGG"; "AGG"; "TYPE"}*/
"LAZM3PK" -> "SFRTCAT"
/*"LAZM3PK" -> {"INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"LAZM3PK" -> {"FLAGG-"; "BOOLEAN"}*/

"LEXTRIPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=LEXTRIPK"]
/*"LEXTRIPK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"LEXTRIPK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"LEXTRIPK" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"LEXTRIPK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "ORDFIN"}*/
/*"LEXTRIPK" -> {"ORDSET"; "FINITE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"LEXTRIPK" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"LEXTRIPK" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"LEXTRIPK" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"LEXTRIPK" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"LEXTRIPK" -> {"IXAGG-"; "CLAGG-"; "BOOLEAN"}*/
"LEXTRIPK" -> "SFRTCAT"
/*"LEXTRIPK" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"}*/

"NORMPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=NORMPK"]
/*"NORMPK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"NORMPK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"NORMPK" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"NORMPK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"}*/
/*"NORMPK" -> {"OAMON"; "OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"; "PDRING"}*/
/*"NORMPK" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"NORMPK" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"NORMPK" -> {"PFECAT"; "UFD"; "RSETCAT"; "TSETCAT"; "PSETCAT"; "CLAGG"}*/
/*"NORMPK" -> {"HOAGG"; "AGG"; "TYPE"}*/

```

```

"NORMPK" -> "SFRTCAT"
/*"NORMPK" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "LIST"; "INT"; "PRIMARR"}*/
/*"NORMPK" -> {"A1AGG-"; "ISTRING"; "NNI"; "BOOLEAN"; "ILIST"}*/
/*"NORMPK" -> {"LSAGG-"; "STAGG-"}*/

"PACEXT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=PACEXT"]
/*"PACEXT" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PACEXT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PACEXT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PACEXT" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"PACEXT" -> {"DIVRING"; "CHARZ"; "RETRACT"; "XF"; "VSPACE"; "FPC"}*/
/*"PACEXT" -> {"CHARNZ"; "FINITE"; "PI"; "NNI"; "INT"; "LIST"; "ILIST"}*/
/*"PACEXT" -> {"LSAGG-"; "STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"}*/
/*"PACEXT" -> {"RCAGG-"; "IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"}*/
/*"PACEXT" -> {"ELTAGG-"; "SETCAT-"; "BASTYPE-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"PACEXT" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"PACEXT" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"PACEXT" -> {"FLAGG"; "ORDSET"; "ELAGG"; "OM"; "VECTOR"; "IVECTOR"}*/
/*"PACEXT" -> {"IARRAY1"; "VECTCAT-"; "A1AGG-"; "UPOLYC"; "POLYCAT"}*/
/*"PACEXT" -> {"PDRING"; "FAMR"; "AMR"; "FRETRCT"; "FLINEXP"; "LINEXP"}*/
/*"PACEXT" -> {"PATMAB"; "PFECAT"; "DIFRING"; "DIFEXT"; "STEP"; "SYMBOL"}*/
/*"PACEXT" -> {"REF"; "ALIST"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"PACEXT" -> {"PRIMARR"; "ISTRING"; "SRAGG-"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"PACEXT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "CFCAT"; "REAL"}*/
/*"PACEXT" -> {"BOOLEAN"; "QFCAT"; "FEVALAB"; "PATAB"; "FPATMAB"; "PACPERC"}*/
/*"PACEXT" -> {"PACRATC"; "PACRAT"}*/
"PACEXT" -> "FACTEXT"

"RECOP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RECOP"]
"RECOP" -> "EXPRSOL" /* by loadlib */
/*"RECOP" -> {"UFPS"; "UTSSOL"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"RECOP" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"RECOP" -> {"ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"RECOP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "KONVERT"; "FS"}*/
/*"RECOP" -> {"ES"; "RETRACT"; "IEVALAB"; "EVALAB"; "PATAB"; "FPATMAB"}*/
/*"RECOP" -> {"TYPE"; "PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"RECOP" -> {"LINEXP"; "CHARZ"; "CHARNZ"; "FIELD"; "EUCDOM"; "PID"}*/
/*"RECOP" -> {"GCDDOM"; "UFD"; "DIVRING"; "COMBOPC"; "CFCAT"; "SYMBOL"}*/
/*"RECOP" -> {"INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"; "SINT"}*/
/*"RECOP" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"; "FLAGG-"}*/
/*"RECOP" -> {"LNAGG-"; "PI"; "NNI"; "ILIST"; "LSAGG-"; "STAGG-"; "LSAGG"}*/
/*"RECOP" -> {"STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"}*/
/*"RECOP" -> {"ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "ELAGG-"}*/
/*"RECOP" -> {"URAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"; "MONOID-"; "ABELMON-"}*/
/*"RECOP" -> {"ORDSET-"; "SGROUP-"; "ABELSG-"; "SETCAT-"; "BASTYPE-"}*/
/*"RECOP" -> {"UPOLYC"; "POLYCAT"; "FAMR"; "AMR"; "PFECAT"; "DIFRING"}*/
/*"RECOP" -> {"DIFEXT"; "STEP"; "BOOLEAN"; "CACHSET"; "INS-"}*/

"RURPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=RURPK"]
/*"RURPK" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"RURPK" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"RURPK" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"RURPK" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"}*/
/*"RURPK" -> {"SYMBOL"; "INT"; "REF"; "ALIST"; "LIST"; "STRING"; "CHAR"}*/

```

```

/*"RURPK" -> {"SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"RURPK" -> {"FLAGG-"; "LNAGG-"; "ILIST"; "LSAGG-"; "STAGG-"; "ELAGG-"}*/
/*"RURPK" -> {"ORDFIN"; "ORDSET"; "FINITE"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"RURPK" -> {"RCAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
/*"RURPK" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"}*/
/*"RURPK" -> {"FLAGG"; "ELAGG"; "OM"; "URAGG-"; "RCAGG-"; "IXAGG-"}*/
/*"RURPK" -> {"CLAGG-"; "BOOLEAN"}*/
"RURPK" -> "SFRTCAT"
/*"RURPK" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"}*/

"SFRGCD" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SFRGCD"]
/*"SFRGCD" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SFRGCD" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"SFRGCD" -> {"SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"SFRGCD" -> {"ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"}*/
/*"SFRGCD" -> {"OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"SFRGCD" -> {"AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"}*/
/*"SFRGCD" -> {"IEVALAB"; "FLINEXP"; "LINEXP"; "KONVERT"; "PATMAB"}*/
/*"SFRGCD" -> {"PFECAT"; "UFD"; "RSETCAT"; "TSETCAT"; "PSETCAT"; "CLAGG"}*/
/*"SFRGCD" -> {"HOAGG"; "AGG"; "TYPE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"SFRGCD" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"}*/
/*"SFRGCD" -> {"BOOLEAN"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"SFRGCD" -> {"INS-"; "NNI"; "ELAGG-"; "FLAGG-"; "OM"}*/
"SFRGCD" -> "SFRTCAT"

"SFQCMKP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SFQCMKP"]
/*"SFQCMKP" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SFQCMKP" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SFQCMKP" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"SFQCMKP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"}*/
/*"SFQCMKP" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"}*/
/*"SFQCMKP" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"SFQCMKP" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SFQCMKP" -> {"KONVERT"; "PATMAB"; "PFECAT"; "UFD"; "RSETCAT"; "TSETCAT"}*/
/*"SFQCMKP" -> {"PSETCAT"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"; "INT"; "LIST"}*/
/*"SFQCMKP" -> {"ILIST"; "LSAGG-"; "STAGG-"; "LSAGG"; "STAGG"; "URAGG"}*/
/*"SFQCMKP" -> {"RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"}*/
/*"SFQCMKP" -> {"ELAGG"; "OM"; "ELAGG-"; "FLAGG-"; "STRING"; "CHAR"; "SINT"}*/
/*"SFQCMKP" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "NNI"; "BOOLEAN"}*/
"SFQCMKP" -> "SFRTCAT"
/*"SFQCMKP" -> {"URAGG-"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/

"SNTSCAT" [color="#4488FF",href="bookvol10.2.pdf#nameddest=SNTSCAT"]
"SNTSCAT" -> "SFRTCAT"
/*"SNTSCAT" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"}*/
/*"SNTSCAT" -> {"KOERCE"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"SNTSCAT" -> {"IEVALAB"; "KONVERT"; "NTSCAT"}*/

"SRDCMPK" [color="#FF4488",href="bookvol10.4.pdf#nameddest=SRDCMPK"]
/*"SRDCMPK" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"SRDCMPK" -> {"CABMON"; "ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"}*/
/*"SRDCMPK" -> {"KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"SRDCMPK" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "OAMONS"}*/
/*"SRDCMPK" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "RPOLCAT"; "POLYCAT"}*/

```

```

/*"SRDCMPK" -> {"PDRING"; "FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"}*/
/*"SRDCMPK" -> {"RETRACT"; "EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"}*/
/*"SRDCMPK" -> {"KONVERT"; "PATMAB"; "PFECAT"; "UFD"}*/
"SRDCMPK" -> "SFRTCAT"
/*"SRDCMPK" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"; "AGG"}*/
/*"SRDCMPK" -> {"TYPE"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"SRDCMPK" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"; "INT"}*/
/*"SRDCMPK" -> {"LIST"; "ILIST"; "LSAGG-"; "NNI"; "STAGG-"; "ELAGG-"}*/
/*"SRDCMPK" -> {"BOOLEAN"; "STRING"; "CHAR"; "SINT"; "OUTFORM"}*/
/*"SRDCMPK" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "FLAGG-"}*/

"SREGSET" [color="#88FF44",href="bookvol10.3.pdf#nameddest=SREGSET"]
"SREGSET" -> "SFRTCAT"
/*"SREGSET" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"; "SETCAT"; "BASTYPE"}*/
/*"SREGSET" -> {"KOERCE"; "CLAGG"; "HOAGG"; "AGG"; "TYPE"; "EVALAB"}*/
/*"SREGSET" -> {"IEVALAB"; "KONVERT"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"SREGSET" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"SREGSET" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"SREGSET" -> {"MODULE"; "ENTIRER"; "OAMONS"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"SREGSET" -> {"ORDSET"; "RPOLCAT"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"}*/
/*"SREGSET" -> {"CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"; "FLINEXP"; "LINEXP"}*/
/*"SREGSET" -> {"PATMAB"; "PFECAT"; "UFD"; "INT"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"SREGSET" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"SREGSET" -> {"IXAGG-"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"SREGSET" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "FLAGG"; "ELAGG"; "OM"}*/
/*"SREGSET" -> {"BOOLEAN"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"SREGSET" -> {"SETCAT-"; "BASTYPE-"; "NNI"; "MONOID-"; "ABELMON-"}*/
/*"SREGSET" -> {"SGROUP-"; "ABELSG-"; "INS-"; "STRING"; "CHAR"; "SINT"}*/
/*"SREGSET" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "FINITE"}*/

"ZDSOLVE" [color="#FF4488",href="bookvol10.4.pdf#nameddest=ZDSOLVE"]
/*"ZDSOLVE" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"ZDSOLVE" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "ABELMON"; "ABELSG"; "CABMON"}*/
/*"ZDSOLVE" -> {"ABELGRP"; "RING"; "RNG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"ZDSOLVE" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "BMODULE"}*/
/*"ZDSOLVE" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "CHARZ"; "REAL"}*/
/*"ZDSOLVE" -> {"KONVERT"; "INT"; "LIST"; "ILIST"; "LSAGG-"; "STAGG-"}*/
/*"ZDSOLVE" -> {"ELAGG-"; "FLAGG-"; "URAGG-"; "ORDFIN"; "FINITE"; "BOOLEAN"}*/
/*"ZDSOLVE" -> {"RSETCAT"; "TSETCAT"; "PSETCAT"; "CLAGG"; "HOAGG"}*/
/*"ZDSOLVE" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"}*/
"ZDSOLVE" -> "SFRTCAT"
/*"ZDSOLVE" -> {"QFCAT"; "FIELD"; "UFD"; "DIVRING"; "RETRACT"; "FEVALAB"}*/
/*"ZDSOLVE" -> {"ELTAB"; "DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"ZDSOLVE" -> {"PATAB"; "FPATMAB"; "PATMAB"; "STEP"; "OINTDOM"; "CHARNZ"}*/
/*"ZDSOLVE" -> {"PFECAT"; "RCFIELD"; "FRETRCT"; "RADCAT"; "LSAGG"; "STAGG"}*/
/*"ZDSOLVE" -> {"URAGG"; "RCAGG"; "LNAGG"; "IXAGG"; "ELTAGG"; "FLAGG"}*/
/*"ZDSOLVE" -> {"ELAGG"; "OM"; "LNAGG-"; "RCAGG-"; "IXAGG-"; "CLAGG-"}*/

```

1.4.22 Layer20

Depends on: RECOP Next layer depends on: GUESS

— layer20 —

```
LAYER20=\
  ${OUT}/GUESS.o ${OUT}/INFCLSPT.o \
  layer20done

—————

— layerpic —

/* layer 20 */

"GUESS" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESS"]
/*"GUESS" -> {"NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUEXPR"; "UTSSOL"}*/
/*"GUESS" -> {"EXPRSOL"; "GOPT"; "GOPT0"; "UFPS"}*/
"GUESS" -> "RECOP" /* by loadlib */
/*"GUESS" -> {"UFPS1"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"}*/
/*"GUESS" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"}*/
/*"GUESS" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GUESS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"GUESS" -> {"ENTIRER"; "UFD"; "DIVRING"; "FS"; "ES"; "ORDSET"; "RETRACT"}*/
/*"GUESS" -> {"IEVALAB"; "EVALAB"; "PATAB"; "KONVERT"; "FPATMAB"; "TYPE"}*/
/*"GUESS" -> {"PATMAB"; "FRETRCT"; "GROUP"; "PDRING"; "FLINEXP"; "LINEXP"}*/
/*"GUESS" -> {"CHARZ"; "CHARNZ"; "COMBOPC"; "CFCAT"; "LSAGG"; "STAGG"}*/
/*"GUESS" -> {"URAGG"; "RCAGG"; "HOAGG"; "AGG"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"GUESS" -> {"ELTAB"; "CLAGG"; "FLAGG"; "ELAGG"; "OM"; "INT"; "LIST"}*/
/*"GUESS" -> {"ILIST"; "PI"; "NNI"; "LSAGG-"; "STAGG-"; "SINT"; "INS-"}*/
/*"GUESS" -> {"EUCDOM-"; "UFD-"; "GCDDOM-"; "INTDOM-"; "ALGEBRA-"}*/
/*"GUESS" -> {"DIFRING-"; "ORDRING-"; "MODULE-"; "RING-"; "ABELGRP-"}*/
/*"GUESS" -> {"ABELMON-"; "QFCAT"; "FEVALAB"; "DIFEXT"; "DIFRING"; "STEP"}*/
/*"GUESS" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"GUESS" -> {"REAL"; "PFECAT"; "ORDFIN"; "FINITE"; "POLYCAT"; "FAMR"}*/
/*"GUESS" -> {"AMR"; "UPOLYC"; "STRING"; "CHAR"; "OUTFORM"; "PRIMARR"}*/
/*"GUESS" -> {"A1AGG-"; "ISTRING"; "SRAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"}*/
/*"GUESS" -> {"UTSCAT"; "UPSCAT"; "PSCAT"; "RADCAT"; "TRANFUN"; "TRIGCAT"}*/
/*"GUESS" -> {"ATRIG"; "HYPCAT"; "AHYP"; "ELEMFUN"; "INS"; "VECTOR"}*/
/*"GUESS" -> {"BOOLEAN"; "SYMBOL"; "REF"; "ALIST"; "LNAGG-"; "MONOID-"}*/
/*"GUESS" -> {"ORDSET-"; "ABELSG-"; "SGROUP-"; "SETCAT-"; "RETRACT-"}*/
/*"GUESS" -> {"BASTYPE-"; "IVECTOR"; "IARRAY1"; "VECTCAT-"; "IXAGG-"}*/
/*"GUESS" -> {"RCAGG-"; "CLAGG-"}*/

"INFCLSPT" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INFCLSPT"]
"INFCLSPT" -> "INFCLCT"
/*"INFCLSPT" -> {"SETCATD"; "AFFPL"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"}*/
/*"INFCLSPT" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"INFCLSPT" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"}*/
/*"INFCLSPT" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"INFCLSPT" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "POLYCAT"; "PDRING"}*/
/*"INFCLSPT" -> {"FAMR"; "AMR"; "CHARZ"; "CHARNZ"; "FRETRCT"; "RETRACT"}*/
/*"INFCLSPT" -> {"EVALAB"; "IEVALAB"; "FLINEXP"; "LINEXP"; "ORDSET"}*/
```

```

/*"INFCLSPT" -> {"KONVERT"; "PATMAB"; "PFECAT"; "DIRPCAT"; "IXAGG"; "HOAGG"}*/
/*"INFCLSPT" -> {"AGG"; "TYPE"; "ELTAGG"; "ELTAB"; "DIFEXT"; "DIFRING"}*/
/*"INFCLSPT" -> {"FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"INFCLSPT" -> {"OAMONS"; "VSPACE"; "PRSPCAT"; "LOCPOWC"; "UPSCAT"; "PSCAT"}*/
/*"INFCLSPT" -> {"PLACESC"; "DIVCAT"; "FAMONC"; "BLMETCT"; "SINT"; "NNI"}*/
/*"INFCLSPT" -> {"INT"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "LNAGG"}*/
/*"INFCLSPT" -> {"CLAGG"; "FLAGG"; "ELAGG"; "OM"; "LIST"; "ILIST"; "LSAGG-"}*/
/*"INFCLSPT" -> {"STAGG-"; "ELAGG-"; "FLAGG-"; "URAGG-"; "LNAGG-"; "RCAGG-"}*/
/*"INFCLSPT" -> {"IXAGG-"; "CLAGG-"; "HOAGG-"; "ORDSET-"; "AGG-"; "ELTAGG-"}*/
/*"INFCLSPT" -> {"SETCAT-"; "BASTYPE-"; "BOOLEAN"; "VECTOR"; "PACPERC"; "PI"}*/
/*"INFCLSPT" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "OUTFORM"}*/
/*"INFCLSPT" -> {"PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/

```

1.4.23 Layer21

Depends on: GUESS Next layer depends on: GUESSF1 INFCLSPT

— layer21 —

```

LAYER21=\
  ${OUT}/GUESSAN.o  ${OUT}/GUESSINT.o  ${OUT}/GUESSF1.o  ${OUT}/GUESSP.o \
  ${OUT}/GUESSUP.o  ${OUT}/ICP.o      \
  layer21done

```

— layerpic —

```

/* layer 21 */
/* GUESS */

"GUESSAN" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESSAN"]
/*"GUESSAN" -> {"NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUPEXPR"; "UTSSOL"}*/
/*"GUESSAN" -> {"EXPRSOL"; "GOPT"; "GOPTO"; "UFPS"; "RECOP"; "UFPS1"}*/
"GUESSAN" -> "GUESS" /* by loadlib */
/*"GUESSAN" -> {"ES"; "ORDSET"; "SETCAT"; "BASTYPE"; "KOERCE"; "RETRACT"}*/
/*"GUESSAN" -> {"IEVALAB"; "EVALAB"; "ACF"; "FIELD"; "EUCDOM"; "PID"}*/
/*"GUESSAN" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"GUESSAN" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"GUESSAN" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"GUESSAN" -> {"DIVRING"; "RADCAT"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"}*/
/*"GUESSAN" -> {"OCAMON"; "OAMON"; "OASGP"; "DIFRING"; "KONVERT"; "LINEXP"}*/
/*"GUESSAN" -> {"PATMAB"; "CFECAT"; "REAL"; "CHARZ"; "STEP"; "FS"; "PATAB"}*/
/*"GUESSAN" -> {"FPATMAB"; "TYPE"; "FRETRACT"; "GROUP"; "PDRING"; "FLINEXP"}*/
/*"GUESSAN" -> {"CHARNZ"; "OM"}*/

"GUESSINT" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESSINT"]
/*"GUESSINT" -> {"NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUPEXPR"; "UTSSOL"}*/
/*"GUESSINT" -> {"EXPRSOL"; "GOPT"; "GOPTO"; "UFPS"; "RECOP"; "UFPS1"}*/
"GUESSINT" -> "GUESS" /* by loadlib */
/*"GUESSINT" -> {"INS"; "INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"}*/

```



```

/*"GUESSINT" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"GUESSINT" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"}*/
/*"GUESSINT" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"GUESSINT" -> {"ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"}*/
/*"GUESSINT" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"}*/
/*"GUESSINT" -> {"DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"GUESSINT" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "QFCAT"; "FIELD"}*/
/*"GUESSINT" -> {"DIVRING"; "FEVALAB"; "ELTAB"; "EVALAB"; "IEVALAB"}*/
/*"GUESSINT" -> {"DIFEXT"; "PDRING"; "FLINEXP"; "PATAB"; "FPATMAB"; "TYPE"}*/
/*"GUESSINT" -> {"CHARNZ"; "PFECAT"; "FS"; "ES"; "FRETRCT"; "GROUP"; "OM"}*/

"GUESSF1" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESSF1"]
/*"GUESSF1" -> {"NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUEXPR"; "UTSSOL"}*/
/*"GUESSF1" -> {"EXPRSOL"; "GOPT"; "GOPTO"; "UFPS"; "RECOP"; "UFPS1"}*/
"GUESSF1" -> "GUESS" /* by loadlib */
/*"GUESSF1" -> {"FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM"}*/
/*"GUESSF1" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"}*/
/*"GUESSF1" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"}*/
/*"GUESSF1" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"}*/
/*"GUESSF1" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"}*/
/*"GUESSF1" -> {"STEP"; "DIFRING"; "KONVERT"; "INS"; "OINTDOM"; "ORDRING"}*/
/*"GUESSF1" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "RETRACT"}*/
/*"GUESSF1" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"}*/

"GUESSP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESSP"]
/*"GUESSP" -> {"NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUEXPR"; "UTSSOL"} */
/*"GUESSP" -> {"EXPRSOL"; "GOPT"; "GOPTO"; "UFPS"; "RECOP"; "UFPS1"}*/
"GUESSP" -> "GUESS" /* by loadlib */
/*"GUESSP" -> {"INS"; "UFD"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"}*/
/*"GUESSP" -> {"RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SETCAT"}*/
/*"GUESSP" -> {"BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"; "BMODULE"}*/
/*"GUESSP" -> {"RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "EUCDOM"; "PID"}*/
/*"GUESSP" -> {"OINTDOM"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"}*/
/*"GUESSP" -> {"ORDSET"; "DIFRING"; "KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"}*/
/*"GUESSP" -> {"CFCAT"; "REAL"; "CHARZ"; "STEP"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"GUESSP" -> {"AMR"; "CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"GUESSP" -> {"PFECAT"; "QFCAT"; "FIELD"; "DIVRING"; "FEVALAB"; "ELTAB"}*/
/*"GUESSP" -> {"DIFEXT"; "PATAB"; "FPATMAB"; "TYPE"; "FS"; "ES"}*/
/*"GUESSP" -> {"GROUP"; "OM"}*/

"GUESSUP" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESSUP"]
/*"GUESSUP" -> {"NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUEXPR"; "UTSSOL"} */
/*"GUESSUP" -> {"EXPRSOL"; "GOPT"; "GOPTO"; "UFPS"; "RECOP"; "UFPS1"} */
"GUESSUP" -> "GUESS"
/*"GUESSUP" -> {"MYEXPR"; "MYUP"; "INS"; "UFD"; "GCDDOM"; "INTDOM"} */
/*"GUESSUP" -> {"COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"} */
/*"GUESSUP" -> {"ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"} */
/*"GUESSUP" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"} */
/*"GUESSUP" -> {"MODULE"; "ENTIRER"; "EUCDOM"; "PID"; "OINTDOM"; "ORDRING"} */
/*"GUESSUP" -> {"OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "DIFRING"} */
/*"GUESSUP" -> {"KONVERT"; "RETRACT"; "LINEXP"; "PATMAB"; "CFCAT"; "REAL"}*/
/*"GUESSUP" -> {"CHARZ"; "STEP"; "UPOLYC"; "POLYCAT"; "PDRING"; "FAMR"}*/
/*"GUESSUP" -> {"AMR"; "CHARNZ"; "FRETRCT"; "EVALAB"; "IEVALAB"; "FLINEXP"}*/
/*"GUESSUP" -> {"PFECAT"; "ELTAB"; "DIFEXT"; "FIELD"; "DIVRING"; "QFCAT"}*/

```

```

/*"GUESSUP" -> {"FEVALAB"; "PATAB"; "FPATMAB"; "TYPE"; "FS"; "ES"}*/
/*"GUESSUP" -> {"GROUP"; "COMBOPC"}*/

"ICP" [color="#88FF44",href="bookvol10.3.pdf#nameddest=ICP"]
/*"ICP" -> {"DIVCAT"; "PROJPL"; "NSDPS"; "DIV"}*/
"ICP" -> "PLACES"
"ICP" -> "INFCLSP"
/*"ICP" -> {"INFCLCT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"; "FIELD"}*/
/*"ICP" -> {"EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"}*/
/*"ICP" -> {"ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"ICP" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"}*/
/*"ICP" -> {"UFD"; "DIVRING"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"}*/
/*"ICP" -> {"AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"; "IXAGG"; "ELTAGG"}*/
/*"ICP" -> {"ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"; "ORDSET"; "ELAGG"; "OM"}*/
/*"ICP" -> {"INT"; "LIST"; "ILIST"; "DIRPCAT"; "FRETRCT"; "RETRACT"}*/
/*"ICP" -> {"DIFEXT"; "DIFRING"; "PDRING"; "FLINEXP"; "LINEXP"; "FINITE"}*/
/*"ICP" -> {"ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"; "OASGP"; "OAMONS"}*/
/*"ICP" -> {"VSPACE"; "PLACESC"; "BLMETCT"; "SYMBOL"; "REF"; "ALIST"}*/
/*"ICP" -> {"STRING"; "CHAR"; "SINT"; "OUTFORM"; "PRIMARR"; "A1AGG-"}*/
/*"ICP" -> {"ISTRING"; "SRAGG-"; "FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"}*/
/*"ICP" -> {"ELAGG-"; "URAGG-"}*/

```

1.4.24 Layer22

Depends on: GUESSF1

— layer22 —

```

LAYER22=\
  ${OUT}/GUESSF.o ${OUT}/INFCLSPS.o \
  layer22done

```

— layerpic —

```

/* layer 22 */
/* GUESSF */

"GUESSF" [color="#FF4488",href="bookvol10.4.pdf#nameddest=GUESSF"]
/*"GUESSF" -> { "NEWTON"; "FAMR2"; "FFFG"; "FFFGF"; "SUPEXPR" ; "UTSSOL" } */
/*"GUESSF" -> { "EXPRSOL"; "GOPT"; "GOPTO"; "UFPS"; "RECOP"; "UFPS1" } */
/*"GUESSF" -> "GUESS"/* by loadlib */
/*"GUESSF" -> "GUESSF1" /* by loadlib */
/*"GUESSF" -> { "FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"; "GCDDOM" } */
/*"GUESSF" -> {"INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"; "CABMON"} */
/*"GUESSF" -> {"ABELMON"; "ABELSG"; "SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"} */
/*"GUESSF" -> {"MONOID"; "LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"} */
/*"GUESSF" -> {"MODULE"; "ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"} */
/*"GUESSF" -> {"STEP"; "DIFRING"; "INS"; "OINTDOM"; "ORDRING"; "OAGROUP"} */
/*"GUESSF" -> {"OCAMON"; "OAMON"; "OASGP"; "ORDSET"; "KONVERT"; "RETRACT"} */
/*"GUESSF" -> {"LINEXP"; "PATMAB"; "CFCAT"; "REAL"; "CHARZ"; "FS"; "ES" } */

```

```

/*"GUESSF" -> {"IEVALAB"; "EVALAB"; "PATLAB"; "FPATLAB"; "TYPE"; "FRETRACT"} */
/*"GUESSF" -> {"GROUP"; "PDRING"; "FLINEXP"} */

"INFCLSPS" [color="#88FF44",href="bookvol10.3.pdf#nameddest=INFCLSPS"]
"INFCLSPS" -> "PROJPLPS"
/*"INFCLSPS" -> {"PACOFF"; "NSDPS"; "PLACESPS"; "DIV"; "DIVCAT"; "INFCLCT"}*/
/*"INFCLSPS" -> {"INFCLSPT"; "SETCATD"; "SETCAT"; "BASTYPE"; "KOERCE"}*/
/*"INFCLSPS" -> {"PACFFC"; "FFIELDC"; "FPC"; "FIELD"; "EUCDOM"; "PID"}*/
/*"INFCLSPS" -> {"GCDDOM"; "INTDOM"; "COMRING"; "RING"; "RNG"; "ABELGRP"}*/
/*"INFCLSPS" -> {"CABMON"; "ABELMON"; "ABELSG"; "SGROUP"; "MONOID"}*/
/*"INFCLSPS" -> {"LMODULE"; "BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"}*/
/*"INFCLSPS" -> {"ENTIRER"; "UFD"; "DIVRING"; "CHARNZ"; "FINITE"; "STEP"}*/
/*"INFCLSPS" -> {"DIFRING"; "PACPERC"; "LSAGG"; "STAGG"; "URAGG"; "RCAGG"}*/
/*"INFCLSPS" -> {"HOAGG"; "AGG"; "TYPE"; "EVALAB"; "IEVALAB"; "LNAGG"}*/
/*"INFCLSPS" -> {"IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "KONVERT"; "FLAGG"}*/
/*"INFCLSPS" -> {"ORDSET"; "ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "DIRPCAT"}*/
/*"INFCLSPS" -> {"FRETRACT"; "RETRACT"; "DIFEXT"; "PDRING"; "FLINEXP"}*/
/*"INFCLSPS" -> {"LINEXP"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"INFCLSPS" -> {"OASGP"; "OAMONS"; "VSPACE"; "PLACESC"; "BLMETCT"}*/
/*"INFCLSPS" -> {"SYMBOL"; "REF"; "ALIST"; "STRING"; "CHAR"; "SINT"}*/
/*"INFCLSPS" -> {"OUTFORM"; "PRIMARR"; "A1AGG-"; "ISTRING"; "SRAGG-"}*/
/*"INFCLSPS" -> {"FLAGG-"; "LNAGG-"; "LSAGG-"; "STAGG-"; "ELAGG-"; "URAGG-"}*/

```

1.4.25 Layer23

Depends on: INFCLSPS

Note that PAFF and PAFFFF form clique2.spad. Each one depends on the other.

— layer23 —

```

LAYER23=\
  ${MID}/clique2.spad \
  layer23done

```

— layerpic —

```

/* layer 23 */

"PAFF" -> "PAFFFF"
"PAFF" -> "INFCLSPS"
/*"PAFF" -> {"BLMETCT"; "GPAFF"; "PFORP"; "PACOFF"; "PROJPLPS"; "PLACESPS"}*/
/*"PAFF" -> {"NSDPS"; "LOCPOWC"; "DIV"; "SETCATD"; "PLACESC"; "DIVCAT"}*/
/*"PAFF" -> {"INFCLCT"; "DSTREE"; "DSTRCAT"; "PRSPCAT"; "UTSZ"; "PACFFC"}*/
/*"PAFF" -> {"PACPERC"; "PROJPL"; "PLACES"; "INFCLSPT"; "PROJPL"; "ICP"}*/
/*"PAFF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PAFF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PAFF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PAFF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/

```

```

/*"PAFF" -> {"DIVRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"PAFF" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PAFF" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"PAFF" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PAFF" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"PAFF" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "DIRPCAT"; "DIFEXT"}*/
/*"PAFF" -> {"DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PAFF" -> {"OASGP"; "OAMONS"; "VSPACE"; "INS"; "OINTDOM"; "CFCAT"; "REAL"}*/
/*"PAFF" -> {"STEP"; "PI"; "NNI"; "BOOLEAN"}*/

"PAFFFF" -> "PAFF"
"PAFF" -> "INFCLSPS"
/*"PAFF" -> {"BLMETCT"; "GPAFF"; "PFORP"; "PACOFF"; "PROJPLPS"; "PLACESPS"}*/
/*"PAFF" -> {"NSDPW"; "LOCPOWC"; "DIV"; "SETCATD"; "PLACESC"; "DIVCAT"}*/
/*"PAFF" -> {"INFCLCT"; "DSTREE"; "DSTRCAT"; "PRSPCAT"; "UTSZ"; "PACFFC"}*/
/*"PAFF" -> {"PACPERC"; "PROJPL"; "PLACES"; "INFCLSPT"; "PROJPL"; "ICP"}*/
/*"PAFF" -> {"FIELD"; "EUCDOM"; "PID"; "GCDDOM"; "INTDOM"; "COMRING"}*/
/*"PAFF" -> {"RING"; "RNG"; "ABELGRP"; "CABMON"; "ABELMON"; "ABELSG"}*/
/*"PAFF" -> {"SETCAT"; "BASTYPE"; "KOERCE"; "SGROUP"; "MONOID"; "LMODULE"}*/
/*"PAFF" -> {"BMODULE"; "RMODULE"; "ALGEBRA"; "MODULE"; "ENTIRER"; "UFD"}*/
/*"PAFF" -> {"DIVRING"; "POLYCAT"; "PDRING"; "FAMR"; "AMR"; "CHARZ"}*/
/*"PAFF" -> {"CHARNZ"; "FRETRCT"; "RETRACT"; "EVALAB"; "IEVALAB"}*/
/*"PAFF" -> {"FLINEXP"; "LINEXP"; "ORDSET"; "KONVERT"; "PATMAB"; "PFECAT"}*/
/*"PAFF" -> {"LSAGG"; "STAGG"; "URAGG"; "RCAGG"; "HOAGG"; "AGG"; "TYPE"}*/
/*"PAFF" -> {"LNAGG"; "IXAGG"; "ELTAGG"; "ELTAB"; "CLAGG"; "FLAGG"}*/
/*"PAFF" -> {"ELAGG"; "OM"; "INT"; "LIST"; "ILIST"; "DIRPCAT"; "DIFEXT"}*/
/*"PAFF" -> {"DIFRING"; "FINITE"; "ORDRING"; "OAGROUP"; "OCAMON"; "OAMON"}*/
/*"PAFF" -> {"OASGP"; "OAMONS"; "VSPACE"; "INS"; "OINTDOM"; "CFCAT"; "REAL"}*/
/*"PAFF" -> {"STEP"; "PI"; "NNI"; "BOOLEAN"}*/

```

1.4.26 Order

The final order of the layers is determined here. The GUESS package is broken so we remove the layers involved until this can be resolved.

— **order** —

```

ORDER=\
  ${LAYER0BOOTSTRAP}    ${LAYER0}  ${LAYER1}  ${LAYER2}  ${LAYER3}  \
  ${LAYER4}    ${LAYER5}  ${LAYER6}  ${LAYER7}  ${LAYER8}  ${LAYER9}  \
  ${LAYER10}   ${LAYER11} ${LAYER12} ${LAYER13} ${LAYER14} ${LAYER15} \
  ${LAYER16}   ${LAYER17} ${LAYER18} ${LAYER19} ${LAYER20} ${LAYER21} \
  ${LAYER22}   ${LAYER23} ${LAYEROCOPY}

```

```

ORDER=\
  ${LAYER0BOOTSTRAP}    ${LAYER0}  ${LAYER1}  ${LAYER2}  ${LAYER3}  \
  ${LAYER4}    ${LAYER5}  ${LAYER6}  ${LAYER7}  ${LAYER8}  ${LAYER9}  \
  ${LAYER10}   ${LAYER11} ${LAYER12} ${LAYER13} ${LAYER14} ${LAYER15} \
  ${LAYER16}   ${LAYER17} ${LAYER18} ${LAYER19} ${LAYEROCOPY}

```

1.5 Cliques

The algebra code sometimes have circular references. The compiler can resolve these references directly if all of the required sources are in the same source file.

So the idea to remove the BOOTSTRAP code is to cluster the spad sources into "cliqueN.spad" files and feed them all to the compiler at once.

— **newcode** —

```
CLIQUE1FILES = ${OUT}/MYUP.o ${OUT}/MYEXPR.o

${MID}/clique1.spad: ${CLIQUE1FILES}
@echo sa01 making ${OUT}/MYUP.o from ${MID}/clique1.spad
@echo sa02 making ${OUT}/MYEXPR.o from ${MID}/clique1.spad
@ (cd ${MID} ; \
    cat ${IN}/MYUP.spad >clique1.spad ; \
    cat ${IN}/MYEXPR.spad >>clique1.spad ; \
    if [ -z "${NOISE}" ] ; then \
        echo ")co clique1.spad" | ${INTERPSYS} ; \
    else \
        echo ")co clique1.spad" | ${INTERPSYS} >${TMP}/trace ; \
    fi )
@ cp ${MID}/MYUP.nrlib/code.o ${OUT}/MYUP.o
@ cp ${MID}/MYEXPR.nrlib/code.o ${OUT}/MYEXPR.o
```

Here we have the general case where two files are co-dependent, that is, PAFF and PAFFFF both have to be compiled together. They also have a set of prerequired files that must be loaded since they are not yet in the new database.

— **newcode** —

```
CLIQUE2FILES = ${OUT}/PAFF.o ${OUT}/PAFFFF.o
CLIQUE2DEPS = BLMETCT GPAFF PFORP PACOFF PROJPLPS PLACESPS NSDPS LOCPOWC \
              DIV SETCATD PLACESC DIVCAT INFCLSPS INFCLCT DSTREE DSTRCAT \
              PRSPCAT UTSZ PACFFC PACPERC PROJPL PLACES INFCLSPT PROJPL ICP

${MID}/clique2.spad: ${CLIQUE2FILES}
@echo sa03 making ${OUT}/PAFF.o from ${MID}/clique2.spad
@echo sa04 making ${OUT}/PAFFFF.o from ${MID}/clique2.spad
@ (cd ${MID} ; \
    cat ${IN}/PAFF.spad >clique2.spad ; \
    cat ${IN}/PAFFFF.spad >>clique2.spad ; \
    if [ -z "${NOISE}" ] ; then \
        echo -e ")lib ${CLIQUE2DEPS} \n )co clique2.spad" \
        | ${INTERPSYS} ; \
    else \
        echo -e ")lib ${CLIQUE2DEPS} \n )co clique2.spad" \
        | ${INTERPSYS} >${TMP}/trace ; \
        echo ")co clique2.spad" | ${INTERPSYS} >${TMP}/trace ; \
    fi )
@ cp ${MID}/PAFF.nrlib/code.o ${OUT}/PAFF.o
@ cp ${MID}/PAFFFF.nrlib/code.o ${OUT}/PAFFFF.o
```

— ignore —

```

EXPRDEPS = LF

${MID}/EXPR.nrllib/code.o: ${MID}/EXPR.spad
@echo sa05 newcode EXPR.o depends on LF.o
@ ( cd ${MID} ; \
    echo -e ")lib ${EXPRDEPS} \n )co EXPR.spad" | ${INTERPSYS} )
@ cp ${MID}/EXPR.nrllib/code.o ${OUT}/EXPR.o

```

1.6 Broken Files

These files are Aldor files

```

axtimer.as Timer
iviews.as InventorRenderPackage IVREND
ffrac.as FormalFraction FORMAL
iviews.as InventorViewPort IVVIEW
iviews.as InventorDataSink IVDATA
herm.as PackedHermitianSequence PACKED
nsfip.as NagSpecialFunctionsInterfacePackage NAGSPE
nrc.as NagResultChecks NAGRES
nqip.as NagQuadratureInterfacePackage NAGQUA
noptip.as NagOptimizationInterfacePackage NAGOPT
nepip.as NagEigenInterfacePackage NAGEIG
ndftip.as NagDiscreteFourierTransformInterfacePackage NAGDIS

```

These domains are referenced but don't exist

OBJECT

1.7 The Environment

1.7.1 The working directories

We define 5 directories for this build. The **IN** directory contains the pamphlet files for the algebra. These are expanded into the **MID** directory as either .spad or .as files. The .spad files are compiled by the native spad internal compiler. The .as files are compiled using the Aldor compiler. The output of the compilation has two purposes. Part of the information is used to build various database files (daase files). The other part is executable code which is placed in the **OUT** directory. When invoked as “make document” we construct the .dvi files in the **DOC** directory.

The `OUTSRC=${MNT}/${SYS}/src/algebra` subdirectory contains the algebra source files extracted from the pamphlet files. These sources allow the end user to change the algebra if needed.

— environment —

see books/bookvol10.pamphlet for source

```
IN=${SRC}/algebra
MID=${INT}/algebra
OUT=${MNT}/${SYS}/algebra
DOC=${MNT}/${SYS}/doc/src/algebra
OUTSRC=${MNT}/${SYS}/src/algebra
OUTSPAD=${MNT}/${SYS}/src/algebra
INPUT=${INT}/input
LISP=${OBJ}/${SYS}/bin/lisp
LISPTANGLE=${OBJ}/${SYS}/bin/lisp
BOOKSRC=${SPD}/books/bookvol15.pamphlet
```

—

1.7.2 The depsys variable

The **depsys** image is the compile-time environment for boot and lisp files.

— environment —

```
DEPSYS=${OBJ}/${SYS}/bin/depsys
```

—

1.7.3 The interpsys variable

The **interpsys** image is the compile-time environment for algebra files.

— environment —

```
INTERPSYS=${OBJ}/${SYS}/bin/interpsys
```

—

1.7.4 The shell variable

We use the “-e” flag to echo which is not supported by the “sh” shell but is supported by “bash”. The “-e” flag to echo causes it to interpret special characters, in our case newlines.

— environment —

```
SHELL=bash
```

—

1.8 The Makefile Stanzas

A spad pamphlet can contain many Axiom categories, domains, and packages.

For the purpose of explanation we assume that the pamphlet file is named `foo.spad.pamphlet`. It contains the domains BAR, BAX, and BAZ. Thus there will be a subsection named `foo.spad`.

Since pamphlet files (e.g. `foo.spad.pamphlet`) contain a spad file e.g. `foo.spad`, it follows that every subsection contains a Makefile stanza that extract the `foo.spad` file using `notangle`.

Since pamphlet files are intended as documents it follows that each subsection contains a Makefile stanza that extracts a dvi file using `noweave`.

We could have a category, domain, or package that is in the “bootstrap” list. Bootstrap spad files contain their generated lisp code in special sections. The way bootstrapping works is that we extract the lisp code and compile it rather than extracting the spad code. We do this because we need the domain to exist before we can compile the domain. Some domains depend on themselves directly. Some domains depend on themselves thru a long chain of other domains. In either case we can’t compile the domain until it exists so we cache the generated lisp code and, when we need to bootstrap the domain, we compile the raw lisp rather than the spad.

This will only happen when the system is built from scratch. Once the system has been built the bootstrap code is no longer executed and these algebra files will appear as normal algebra files. That means that once the system has been built once only the last three rules will ever be executed. The first two rules happen when the system is built from scratch.

A 5 stanza group for this case performs the following functions:

1. extract the lisp `BAR.lsp` from the pamphlet `foo.spad.pamphlet`
2. compile and copy the bootstrap lisp to the final algebra directory
3. extract the bootstrap `BAR.lsp` from the spad file `foo.spad`
4. compile the extracted BAR domain
5. copy the compiled BAR to the final algebra directory

The subtle point here occurs in the first item. The bootstrap code group (in the `layer0` bootstrap code chunk above) asks for the compiled “.o” files in the `\${MID}` directory. Essentially this code group calls for intermediate compiled files. This triggers the bootstrap stanzas (items 1 and 2 above). All of the other layer chunks ask for compiled code in the `\${OUT}` directory which is the final algebra directory.

The bootstrap process works because first we ask for the compiled lisp code stanzas (the `\${MID}/BAR.o` files), THEN we ask for the final algebra code stanzas (the `\${OUT}/BAR.o` files). This is a very subtle point so think it through carefully. The `layer0` bootstrap list is the only file list that calls for `\${MID}` files. All other layers ask for `\${OUT}` files. Make sure you understand this before you change things. If you break it the world will no longer compile.

So we have a 3 stanza group for normal files, a 3+2 (5) stanza group for normal files with default code, and a 3+2 (5) stanza group for normal files that need to be bootstrapped. There is another combination that occurs, namely bootstrap code that also contains default code which gives a 3+2+2+2 (9) stanza case. (see `TSETCAT` for an example. Be sure to read the items in reverse order).

A 9 stanza group for this case performs the following functions:

1. extract the bootstrap BAR.lsp from the foo.spad.pamphlet
2. compile the bootstrap BAR.lsp and copy to the intermediate directory
3. extract the bootstrap BAR-.lsp from the foo.spad.pamphlet
4. compile the bootstrap BAR-.lsp and copy to intermediate directory
5. extract the spad BAR.spad from the pamphlet foo.spad.pamphlet
6. compile the extracted BAR.spad domain (to get BAR.o)
7. copy the BAR.o to the final algebra directory
8. compile the extracted BAR.spad domain (to get BAR-.o)
9. copy the BAR-.o to the final algebra directory

As you can see this is just the combination of the two possible 5 stanza case. We just have to deal with the BAR- both in regular and bootstrap files. The first four stanzas will only happen when the system is built from scratch. Once the system is built these four rules no longer apply and these stanzas effectively act like the 5 stanza rules above.

I'm sure all of this seems confusing but it is very stylized code. Basically you need to figure out which kind of stanza group you need, copy an existing stanza group, and do a correct renaming of the parts. The decision tree looks something like:

```

IF (you have a regular spad domain)
  THEN use a 3 stanza form (see YSTREAM)
IF (you have a default spad domain (it generates '-' files)) AND
  (it does not require bootstrapping)
  THEN use the first 5 stanza form explained above (see LIECAT)
IF (you have a normal spad domain) AND
  (it requires bootstrapping)
  THEN use the second 5 stanza form explained above (see VECTOR)
IF (you have a default spad domain (it generates '-' files)) AND
  (it requires bootstrapping)
  THEN use the 9 stanza form explained above (see TSETCAT)

```

1.9 Generic Make Rules

The idea is to use generic rules to try to cut down the size of this file.

This Makefile works very hard to cache intermediate results in order to minimize the re-build time. The cached files are kept in the int or obj directories. If one of these files disappears but the original pamphlet file is unchanged we only need to rebuild the intermediate file. These rule will attempt to do that and they succeed however these are intermediate files created by implicit rules so they would normally be deleted. To prevent the removal the nrlib directory and its contents, the files are marked as .PRECIOUS.

The output of the compile step is saved in a file of the same name and extension .out in the \$MID directory. These files are useful for deriving the dependencies by scanning the "Loading ..." messages.

```

${OUT}/%.o: ${MID}/%.nrlib/code.o
@ echo sa06 copying $.nrlib to $.o
@ cp ${MID}/$.nrlib/code.o ${OUT}/$.o

```

— genericnrlibfiles —

```

.PRECIOUS: ${MID}/%.nrlib/code.o
${MID}/%.nrlib/code.o: ${MID}/%.spad
@ echo sa07 compiling $.spad to $.nrlib
@ if [ -z "${NOISE}" ] ; then \
    (cd ${MID} ; \
     echo ")co $.spad" | ${INTERPSYS} ) ; \
    else \
    (cd ${MID} ; \
     echo ")co $.spad" | ${INTERPSYS} ) 1>/dev/null 2>/dev/null ; \
fi

```

— genericBOOTSTRAPfiles —

```

${MID}/%.o: ${MID}/%.lsp
@ echo sa08 compiling $.lsp to $.o
@ (cd ${MID} ; \
  if [ -z "${NOISE}" ] ; then \
    echo '(progn (in-package (quote boot)) (compile-file "$*.lsp" :output-file "$*.o"))'\
      | ${DEPSYS} ; \
  else \
    echo '(progn (in-package (quote boot)) (compile-file "$*.lsp" :output-file "$*.o"))'\
      | ${DEPSYS} 1>/dev/null 2>/dev/null ; \
  fi )
@ cp ${MID}/$.o ${OUT}/$.o

```

— genericSPADfiles —

```

${OUTSRC}/%.spad: ${IN}/%.pamphlet
@ echo sa09tangling $.pamphlet to $.spad
@(cd ${OUTSRC} ; \
  ${TANGLE} ${IN}/$.pamphlet >$.spad )

```

— genericDOCfiles —

```

${DOC}/%.dvi: ${IN}/%.pamphlet ${DOC}/ps
@ echo sa10 latexing $.pamphlet to ${DOC}/$.dvi
@ (cd ${DOC} ; \
cp ${IN}/$.pamphlet ${DOC} ; \
${DOCUMENT} ${NOISE} $* ; \
rm -f ${DOC}/$.pamphlet ; \
rm -f ${DOC}/$.tex ; \
rm -f ${DOC}/$* )

```

— genericRules —

```

\getchunk{genericDotFiles}
\getchunk{genericnrLibfiles}
\getchunk{genericBOOTSTRAPfiles}
\getchunk{genericSPADfiles}
\getchunk{genericDOCfiles}

```

— libdb.text (OUT from IN) —

```

${OUT}/libdb.text: ${IN}/libdb.text
@ echo sa11 copying ${IN}/libdb.text to ${OUT}/libdb.text
@ cp ${IN}/libdb.text ${OUT}/libdb.text

```

— ps (DOC from SRC) —

```

${DOC}/ps: ${SRC}/doc/ps
@echo sa12 making ${DOC}/ps from ${SRC}/doc/ps
@cp -pr ${SRC}/doc/ps ${DOC}

```

1.10 Pamphlet file structure

Because the individual .spad files are grouped into higher-level algebra pamphlet files, the rules for extracting them are coded below as simple “awk” scripts that are called when the Makefile is constructed.

— findAlgebraFiles —

```

\getchunk{findSpadFiles}
\getchunk{findBootstrapFiles}

```

There are, at present, 2 kinds of algebra files to be handled.

There are the bootstrap files. These files live within their respective pamphlet files and are "captured" lisp code. These are necessary to create the algebra. See the `src/algebra/Makefile.pamphlet` for details.

Second, there are 3 "types" of algebra which are all treated the same at compile time, namely the "domain", "category", and "package" algebra.

1.10.1 Finding the algebra code

Step 1 is to scan all of the algebra pamphlet files for the chunk names which contain the string "domain", "package", or "category". This is done using `grep -E` (same as `egrep`, which means that the pattern is an extended regular expression) because extended regular expressions allows the use of alternatives written as (domain—package—category). Thus the command

```
grep -E '\begin{chunk}{(domain|package|category)\ .*}' *.pamphlet
```

will scan the algebra files looking for special chunknames. Axiom's chunk names are written in a stylized form so that each algebra chunk name begins with one of those three symbols. Thus in `bookvol10.3.pamphlet` the `LexTriangularPackage` chunkname is:

```
begin{chunk}{package LEXTRIPK LexTriangularPackage}
```

so this `grep` will generate an output line, prefixed by the filename that looks like:

```
bookvol10.3.pamphlet:begin{chunk}{package LEXTRIPK LexTriangularPackage}
```

There can be many lines of output per pamphlet file, one for each domain, package and category cod chunk contained in the file. The results are sorted and made unique.

Step 2 is an `awk` command line.

1.10.2 Write the Makefile stanzas for the algebra files

— findSpadFiles —

```
grep -E 'begin{chunk}{category\ .*}' ${BOOKS}/bookvol10.2.pamphlet | sort | uniq | awk -F: '{
    chunk=substr($1,15,length($1)-15);
    split(chunk,part," ");
    spadfile="${MID}/"part[2]".spad";
    print spadfile": ${BOOKS}/bookvol10.2.pamphlet";
    print "    @echo \x27(tangle \"${BOOKS}/bookvol10.2.pamphlet\" \"\"chunk\"\" \"\"part[2]\".spad\")\x27 | ${LISP}
    print "";
}'
```

```
grep -E 'begin{chunk}{domain\ .*}' ${BOOKS}/bookvol10.3.pamphlet | sort | uniq | awk -F: '{
    chunk=substr($1,15,length($1)-15);
    split(chunk,part," ");
    spadfile="${MID}/"part[2]".spad";
    print spadfile": ${BOOKS}/bookvol10.3.pamphlet";
    print "    @echo \x27(tangle \"${BOOKS}/bookvol10.3.pamphlet\" \"\"chunk\"\" \"\"part[2]\".spad\")\x27 | ${LISP}
```

```

    print "";
  },

  grep -E 'begin{chunk}{package\ .*}' ${BOOKS}/bookvol10.4.pamphlet | sort | uniq | awk -F: '{
    chunk=substr($1,15,length($1)-15);
    split(chunk,part," ");
    spadfile="${MID}/"part[2]".spad";
    print spadfile": ${BOOKS}/bookvol10.4.pamphlet";
    print "      @echo \x27(tangle \"${BOOKS}/bookvol10.4.pamphlet\" \"\"chunk\"\" \"\"part[2]\".spad\")\x27 | ${LISPTAN
    print "";
  },

  grep -E 'begin{chunk}{package\ .*}' ${BOOKS}/bookvol10.5.pamphlet | sort | uniq | awk -F: '{
    chunk=substr($1,15,length($1)-15);
    split(chunk,part," ");
    spadfile="${MID}/"part[2]".spad";
    print spadfile": ${BOOKS}/bookvol10.5.pamphlet";
    print "      @echo \x27(tangle \"${BOOKS}/bookvol10.5.pamphlet\" \"\"chunk\"\" \"\"part[2]\".spad\")\x27 | ${LISPTAN
    print "";
  },
},

```

awk processes each line of the grep output.

The awk script uses “-F:” which is a flag that says that a “:” is the field separator. As a result the \$1 and \$2 in the awk script refer to the parts of the grep output that come before and after the “:” respectively.

The variable “chunk” is assigned the actual chunk name minus the ‘\begin{chunk}{’ and ‘}’ delimiters. In the example given above this will become

```
package LEXTRIPK LexTriangularPackage
```

The call to “split” splits the chunk into parts separated by spaces. Thus

```

part[1]=package
part[2]=LEXTRIPK
part[3]=LexTriangularPackage

```

The variable “spadfile” in the above example is set to

```
${MID}/LEXTRIPK.spad
```

Finally, in the domain example given above we print two lines. The first line is the Makefile stanza header which depends on the original “zerodim.spad.pamphlet” file.

The second line is the body of the makefile stanza which calls notangle to extract the algebra from the original pamphlet using the chunk name and writes it to the intermediate subdirectory. In the case above this would resolve to \${MID}/LEXTRIPK.spad.

For the line given above it outputs the following:

```

${MID}/LEXTRIPK.spad: ${IN}/bookvol10.3.pamphlet
    echo '(tangle "bookvol10.4.pamphlet" "package LEXTRIPK LexTriangularPackage" "LEXTRIPK.spad")' | ${LISPTAN

```

1.10.3 Find the algebra bootstrap code

Step 3 works like step 1 above except that we are looking for chunk names that have the "BOOTSTRAP" string. The output will look like:

```
bookvol10.3.pamphlet:begin{chunk}{VECTOR.lsp BOOTSTRAP}
```

This output, which can consist of many lines per input file is piped into "awk".

1.10.4 Write the Makefile stanzas for the bootstrap files

For each of the above output lines we run an "grep" command:

— findBootstrapFiles —

```
grep 'begin{chunk}{.*BOOTSTRAP}' ${BOOKS}/bookvol10.2.pamphlet | sort | uniq | \
awk -F: '{
  chunk=substr($1,15,length($1)-15);
  split(chunk,part," ");
  lspfile="${MID}/"part[1];
  print lspfile": ${BOOKS}/bookvol10.2.pamphlet";
  print "    @echo \x27(tangle \"${BOOKS}/bookvol10.2.pamphlet\" \"\"chunk\"\" \"\"lspfile\"\")\x27 | ${LISPTANGLE}
  print "";
}'
```

```
grep 'begin{chunk}{.*BOOTSTRAP}' ${BOOKS}/bookvol10.3.pamphlet | sort | uniq | \
awk -F: '{
  chunk=substr($1,15,length($1)-15);
  split(chunk,part," ");
  lspfile="${MID}/"part[1];
  print lspfile": ${BOOKS}/bookvol10.3.pamphlet";
  print "    @echo \x27(tangle \"${BOOKS}/bookvol10.3.pamphlet\" \"\"chunk\"\" \"\"lspfile\"\")\x27 | ${LISPTANGLE}
  print "";
}'
```

The process is the same way as described above except that there are only two parts to the chunk names

```
part[1]=VECTOR.lsp
part[2]=BOOTSTRAP
```

The lspfile variable is assigned

```
${MID}/VECTOR.lsp
```

Finally we output two lines:

```
${MID}/vector.spad.pamphlet: ${IN}/bookvol10.3.pamphlet
    @echo '(tangle "${IN}/bookvol10.4.pamphlet" "VECTOR.lsp BOOTSTRAP" "VECTOR.lsp")' | ${LISPTANGLE}
```

The first line is the stanza head and creates a dependence between the intermediate file, in this case int/algebra/VECTOR.lsp and the input file src/algebra/vector.spad.pamphlet

The second line calls the lisp "tangle" to extract the required chunk from the source file.

1.11 Stage markers

We output these as each stage completes.

— stages —

```
layer0bootstrap:
@ echo =====
@ echo === algebra bootstrap complete bookvol10
@ echo =====

layer0copy:
@ echo =====
@ echo === layer 0 copy complete bookvol10
@ echo =====

layer0done:
@ echo =====
@ echo === layer 0 of 24 complete bookvol10
@ echo =====

layer1done:
@ echo =====
@ echo === layer 1 of 24 complete bookvol10
@ echo =====

layer2done:
@ echo =====
@ echo === layer 2 of 24 complete bookvol10
@ echo =====

layer3done:
@ echo =====
@ echo === layer 3 of 24 complete bookvol10
@ echo =====

layer4done:
@ echo =====
@ echo === layer 4 of 24 complete bookvol10
@ echo =====

layer5done:
@ echo =====
@ echo === layer 5 of 24 complete bookvol10
@ echo =====

layer6done:
@ echo =====
@ echo === layer 6 of 24 complete bookvol10
@ echo =====

layer7done:
@ echo =====
@ echo === layer 7 of 24 complete bookvol10
```

```
@ echo =====

layer8done:
@ echo =====
@ echo === layer 8 of 24 complete bookvol10
@ echo =====

layer9done:
@ echo =====
@ echo === layer 9 of 24 complete bookvol10
@ echo =====

layer10done:
@ echo =====
@ echo === layer 10 of 24 complete bookvol10
@ echo =====

layer11done:
@ echo =====
@ echo === layer 11 of 24 complete bookvol10
@ echo =====

layer12done:
@ echo =====
@ echo === layer 12 of 24 complete bookvol10
@ echo =====

layer13done:
@ echo =====
@ echo === layer 13 of 24 complete bookvol10
@ echo =====

layer14done:
@ echo =====
@ echo === layer 14 of 24 complete bookvol10
@ echo =====

layer15done:
@ echo =====
@ echo === layer 15 of 24 complete bookvol10
@ echo =====

layer16done:
@ echo =====
@ echo === layer 16 of 24 complete bookvol10
@ echo =====

layer17done:
@ echo =====
@ echo === layer 17 of 24 complete bookvol10
@ echo =====

layer18done:
@ echo =====
```



```

@ echo === layer 18 of 24 complete bookvol10
@ echo =====

layer19done:
@ echo =====
@ echo === layer 19 of 24 complete bookvol10
@ echo =====

layer20done:
@ echo =====
@ echo === layer 20 of 24 complete bookvol10
@ echo =====

layer21done:
@ echo =====
@ echo === layer 21 of 24 complete bookvol10
@ echo =====

layer22done:
@ echo =====
@ echo === layer 22 of 24 complete bookvol10
@ echo =====

layer23done:
@ echo =====
@ echo === layer 23 of 24 complete bookvol10
@ echo =====

layer24done:
@ echo =====
@ echo === layer 24 of 24 complete bookvol10
@ echo =====

```

1.11.1 Regression testing

There is a Makefile variable called REGRESS in the algebra Makefile:

```

REGRESS=\
  AssociationList.regress  BalancedBinaryTree.regress \

```

This is part of a Makefile that structure within the algebra Makefile. This Makefile gets extracted by the Makefile in the input subdirectory. Thus there is a connection between the two Makefiles (algebra and input). This algebra regression Makefile goes by the chunk name **algebra.regress**. It contains a list of regression files and a single stanza:

```

%.regress: %.input
@ echo sa13 algebra regression testing $*
@ (cd ${MID} ; \
  rm -f $*.output ; \
  if [ -z "${NOISE}" ] ; then \
    echo ')read $*.input' | ${TESTSYS} ; \
  else \

```

```

        echo `)read $*.input` | ${TESTSYS} >${TMP}/trace ; \
fi ; \
if [ -z "${NOISE}" ] ; then \
    echo `)lisp (regress "$*.output")` | ${TESTSYS} \
        | egrep -v '(Timestamp|Version)' | tee $*.regress ; \
else \
    echo `)lisp (regress "$*.output")` | ${TESTSYS} \
        | egrep -v '(Timestamp|Version)' > $*.regress ; \
fi ; \
fgrep "regression result" $*.regress )

```

The input Makefile extracts **algebra.regress** and then calls make to process this file.

This keeps the regression test list in the algebra Makefile.

The algebra files contain input chunks in regress format. This stanza is extracted by the src/input/Makefile after all of the other regression tests are complete. This stanza is put into a int/Makefile.algebra and then executed by make.

— **algebra.regress** —

```

TESTSYS=  ${OBJ}/${SYS}/bin/interpsys

REGRESS= \
AbelianGroup.regress \
AbelianMonoid.regress \
AbelianMonoidRing.regress \
AbelianSemiGroup.regress \
AdditiveValuationAttribute.regress \
AffineAlgebraicSetComputeWithGroebnerBasis.regress \
AffineAlgebraicSetComputeWithResultant.regress \
AffinePlane.regress \
AffinePlaneOverPseudoAlgebraicClosureOfFiniteField.regress \
AffineSpace.regress \
AffineSpaceCategory.regress \
Aggregate.regress \
Algebra.regress \
AlgebraGivenByStructuralConstants.regress \
AlgebraicallyClosedField.regress \
AlgebraicallyClosedFunctionSpace.regress \
AlgebraicFunctionField.regress \
AlgebraicFunction.regress \
AlgebraicHermiteIntegration.regress \
AlgebraicIntegrate.regress \
AlgebraicIntegration.regress \
AlgebraicManipulations.regress \
AlgebraicMultFact.regress \
AlgebraicNumber.regress \
AlgebraPackage.regress \
AlgFactor.regress \
AnnaNumericalIntegrationPackage.regress \
AnnaNumericalOptimizationPackage.regress \
AnnaOrdinaryDifferentialEquationPackage.regress \
AnnaPartialDifferentialEquationPackage.regress \
AnonymousFunction.regress \
AntiSymm.regress \

```

```

Any.regress \
AnyFunctions1.regress \
ApplicationProgramInterface.regress \
ApplyRules.regress \
ApplyUnivariateSkewPolynomial.regress \
ApproximateAttribute.regress \
ArbitraryExponentAttribute.regress \
ArbitraryPrecisionAttribute.regress \
ArcHyperbolicFunctionCategory.regress \
ArcTrigonometricFunctionCategory.regress \
ArrayStack.regress \
Asp1.regress \
Asp10.regress \
Asp12.regress \
Asp19.regress \
Asp20.regress \
Asp24.regress \
Asp27.regress \
Asp28.regress \
Asp29.regress \
Asp30.regress \
Asp31.regress \
Asp33.regress \
Asp34.regress \
Asp35.regress \
Asp4.regress \
Asp41.regress \
Asp42.regress \
Asp49.regress \
Asp50.regress \
Asp55.regress \
Asp6.regress \
Asp7.regress \
Asp73.regress \
Asp74.regress \
Asp77.regress \
Asp78.regress \
Asp8.regress \
Asp80.regress \
Asp9.regress \
AssociatedEquations.regress \
AssociatedJordanAlgebra.regress \
AssociatedLieAlgebra.regress \
AssociationList.regress \
AssociationListAggregate.regress \
AttachPredicates.regress \
AttributeButtons.regress \
Automorphism.regress \
AxiomServer.regress \
BalancedBinaryTree.regress \
BalancedFactorisation.regress \
BalancedPAdicInteger.regress \
BalancedPAdicRational.regress \
BagAggregate.regress \

```

```

BasicFunctions.regress \
BasicOperator.regress \
BasicOperatorFunctions1.regress \
BasicStochasticDifferential.regress \
BasicType.regress \
Bezier.regress \
BezoutMatrix.regress \
BiModule.regress \
BinaryExpansion.regress \
BinaryFile.regress \
BinaryRecursiveAggregate.regress \
BinarySearchTree.regress \
BinaryTournament.regress \
BinaryTree.regress \
BinaryTreeCategory.regress \
BitAggregate.regress \
Bits.regress \
BlasLevelOne.regress \
BlowUpMethodCategory.regress \
BlowUpPackage.regress \
BlowUpWithHamburgerNoether.regress \
BlowUpWithQuadTrans.regress \
Boolean.regress \
BoundIntegerRoots.regress \
BrillhartTests.regress \
CachableSet.regress \
CancellationAbelianMonoid.regress \
CanonicalAttribute.regress \
CanonicalClosedAttribute.regress \
CanonicalUnitNormalAttribute.regress \
CardinalNumber.regress \
CartesianTensor.regress \
CartesianTensorFunctions2.regress \
Cell.regress \
CentralAttribute.regress \
ChangeOfVariable.regress \
Character.regress \
CharacterClass.regress \
CharacteristicNonZero.regress \
CharacteristicPolynomialInMonogenicalAlgebra.regress \
CharacteristicPolynomialPackage.regress \
CharacteristicZero.regress \
ChineseRemainderToolsForIntegralBases.regress \
CliffordAlgebra.regress \
CoercibleTo.regress \
CoerceVectorMatrixPackage.regress \
Collection.regress \
Color.regress \
CombinatorialFunction.regress \
CombinatorialFunctionCategory.regress \
CombinatorialOpsCategory.regress \
CommonDenominator.regress \
CommonOperators.regress \
CommutativeRing.regress \

```

```

CommutativeStarAttribute.regress \
Commutator.regress \
CommuteUnivariatePolynomialCategory.regress \
Comparable.regress \
Complex.regress \
ComplexCategory.regress \
ComplexDoubleFloatMatrix.regress \
ComplexDoubleFloatVector.regress \
ComplexFactorization.regress \
ComplexIntegerSolveLinearPolynomialEquation.regress \
ComplexFunctions2.regress \
ComplexPattern.regress \
ComplexPatternMatch.regress \
ComplexRootFindingPackage.regress \
ComplexRootPackage.regress \
ComplexTrigonometricManipulations.regress \
ConstantLODE.regress \
ContinuedFraction.regress \
ConvertibleTo.regress \
CoordinateSystems.regress \
CRApackage.regress \
CycleIndicators.regress \
CyclicStreamTools.regress \
CyclotomicPolynomialPackage.regress \
CylindricalAlgebraicDecompositionPackage.regress \
CylindricalAlgebraicDecompositionUtilities.regress \
dasum.regress \
daxpy.regress \
dcabs1.regress \
dcopy.regress \
Database.regress \
DataList.regress \
DecimalExpansion.regress \
DefiniteIntegrationTools.regress \
DegreeReductionPackage.regress \
Dequeue.regress \
DequeueAggregate.regress \
DeRhamComplex.regress \
DesingTree.regress \
DesingTreeCategory.regress \
DesingTreePackage.regress \
Dictionary.regress \
DictionaryOperations.regress \
DifferentialExtension.regress \
DifferentialPolynomialCategory.regress \
DifferentialRing.regress \
DifferentialSparseMultivariatePolynomial.regress \
DifferentialVariableCategory.regress \
DiophantineSolutionPackage.regress \
DirectProduct.regress \
DirectProductCategory.regress \
DirectProductFunctions2.regress \
DirectProductMatrixModule.regress \
DirectProductModule.regress \

```

```

DirichletRing.regress \
DiscreteLogarithmPackage.regress \
DisplayPackage.regress \
DistributedMultivariatePolynomial.regress \
DistinctDegreeFactorize.regress \
DivisionRing.regress \
Divisor.regress \
DivisorCategory.regress \
DoubleFloat.regress \
DoubleFloatMatrix.regress \
DoubleFloatSpecialFunctions.regress \
DoubleFloatVector.regress \
DoubleResultantPackage.regress \
DoublyLinkedAggregate.regress \
DrawComplex.regress \
DrawNumericHack.regress \
DrawOption.regress \
DrawOptionFunctions0.regress \
DrawOptionFunctions1.regress \
d01AgentsPackage.regress \
d01ajfAnnaType.regress \
d01akfAnnaType.regress \
d01alfAnnaType.regress \
d01amfAnnaType.regress \
d01anfAnnaType.regress \
d01apfAnnaType.regress \
d01aqfAnnaType.regress \
d01asfAnnaType.regress \
d01fcfAnnaType.regress \
d01gbfAnnaType.regress \
d01TransformFunctionType.regress \
d01WeightsPackage.regress \
d02AgentsPackage.regress \
d02bbfAnnaType.regress \
d02bhfAnnaType.regress \
d02cjfAnnaType.regress \
d02ejfAnnaType.regress \
d03AgentsPackage.regress \
d03eefAnnaType.regress \
d03fafAnnaType.regress \
EigenPackage.regress \
ElementaryFunction.regress \
ElementaryFunctionCategory.regress \
ElementaryFunctionDefiniteIntegration.regress \
ElementaryFunctionLODESolver.regress \
ElementaryFunctionODESolver.regress \
ElementaryFunctionSign.regress \
ElementaryFunctionStructurePackage.regress \
ElementaryFunctionsUnivariateLaurentSeries.regress \
ElementaryFunctionsUnivariatePuisseuxSeries.regress \
ElementaryIntegration.regress \
ElementaryRischDE.regress \
ElementaryRischDESystem.regress \
EllipticFunctionsUnivariateTaylorSeries.regress \

```

```

Eltable.regress \
EltableAggregate.regress \
EntireRing.regress \
EqTable.regress \
Equation.regress \
EquationFunctions2.regress \
ErrorFunctions.regress \
EuclideanDomain.regress \
EuclideanGroebnerBasisPackage.regress \
EuclideanModularRing.regress \
Evalable.regress \
EvaluateCycleIndicators.regress \
ExpertSystemContinuityPackage.regress \
ExpertSystemContinuityPackage1.regress \
ExpertSystemToolsPackage.regress \
ExpertSystemToolsPackage1.regress \
ExpertSystemToolsPackage2.regress \
ExponentialExpansion.regress \
ExponentialOfUnivariatePuisseuxSeries.regress \
Export3D.regress \
Expression.regress \
ExpressionFunctions2.regress \
ExpressionSpace.regress \
ExpressionSolve.regress \
ExpressionSpaceFunctions1.regress \
ExpressionSpaceFunctions2.regress \
ExpressionSpaceODESolver.regress \
ExpressionToOpenMath.regress \
ExpressionToUnivariatePowerSeries.regress \
ExpressionTubePlot.regress \
ExtAlgBasis.regress \
ExtensibleLinearAggregate.regress \
ExtensionField.regress \
e04AgentsPackage.regress \
e04dggfAnnaType.regress \
e04fdfAnnaType.regress \
e04gcfAnnaType.regress \
e04jafAnnaType.regress \
e04mbfAnnaType.regress \
e04nafAnnaType.regress \
e04ucfAnnaType.regress \
Factored.regress \
FactoredFunctions.regress \
FactoredFunctions2.regress \
FactoredFunctionUtilities.regress \
FactoringUtilities.regress \
FactorisationOverPseudoAlgebraicClosureOfAlgExtOfRationalNumber.regress \
FactorisationOverPseudoAlgebraicClosureOfRationalNumber.regress \
FGLMIfCanPackage.regress \
Field.regress \
FieldOfPrimeCharacteristic.regress \
File.regress \
FileCategory.regress \
FileName.regress \

```

```

FileNameCategory.regress \
FindOrderFinite.regress \
Finite.regress \
FiniteAbelianMonoidRing.regress \
FiniteAbelianMonoidRingFunctions2.regress \
FiniteAggregateAttribute.regress \
FiniteAlgebraicExtensionField.regress \
FiniteDivisor.regress \
FiniteDivisorCategory.regress \
FiniteDivisorFunctions2.regress \
FiniteField.regress \
FiniteFieldCategory.regress \
FiniteFieldCyclicGroup.regress \
FiniteFieldCyclicGroupExtension.regress \
FiniteFieldCyclicGroupExtensionByPolynomial.regress \
FiniteFieldExtension.regress \
FiniteFieldExtensionByPolynomial.regress \
FiniteFieldFactorization.regress \
FiniteFieldFactorizationWithSizeParseBySideEffect.regress \
FiniteFieldFunctions.regress \
FiniteFieldHomomorphisms.regress \
FiniteFieldNormalBasis.regress \
FiniteFieldNormalBasisExtension.regress \
FiniteFieldNormalBasisExtensionByPolynomial.regress \
FiniteFieldPolynomialPackage.regress \
FiniteFieldSolveLinearPolynomialEquation.regress \
FiniteFieldPolynomialPackage2.regress \
FiniteFieldSolveLinearPolynomialEquation.regress \
FiniteFieldSquareFreeDecomposition.regress \
FiniteLinearAggregate.regress \
FiniteLinearAggregateFunctions2.regress \
FiniteLinearAggregateSort.regress \
FiniteRankAlgebra.regress \
FiniteRankNonAssociativeAlgebra.regress \
FiniteSetAggregate.regress \
FiniteSetAggregateFunctions2.regress \
FlexibleArray.regress \
Float.regress \
FloatingComplexPackage.regress \
FloatingPointSystem.regress \
FloatingRealPackage.regress \
FortranCode.regress \
FortranCodePackage1.regress \
FortranExpression.regress \
FortranFunctionCategory.regress \
FortranMachineTypeCategory.regress \
FortranMatrixCategory.regress \
FortranMatrixFunctionCategory.regress \
FortranOutputStackPackage.regress \
FortranPackage.regress \
FortranProgram.regress \
FortranProgramCategory.regress \
FortranScalarType.regress \
FortranTemplate.regress \

```



```

FortranType.regress \
FortranVectorCategory.regress \
FortranVectorFunctionCategory.regress \
FourierComponent.regress \
FourierSeries.regress \
Fraction.regress \
FractionalIdeal.regress \
FractionalIdealFunctions2.regress \
FractionFreeFastGaussian.regress \
FractionFreeFastGaussianFractions.regress \
FractionFunctions2.regress \
FramedAlgebra.regress \
FramedModule.regress \
FramedNonAssociativeAlgebra.regress \
FramedNonAssociativeAlgebraFunctions2.regress \
FreeAbelianGroup.regress \
FreeAbelianMonoid.regress \
FreeAbelianMonoidCategory.regress \
FreeGroup.regress \
FreeLieAlgebra.regress \
FreeModuleCat.regress \
FreeModule.regress \
FreeModule1.regress \
FreeMonoid.regress \
FreeNilpotentLie.regress \
FullPartialFractionExpansion.regress \
FullyEvaluableOver.regress \
FullyLinearlyExplicitRingOver.regress \
FullyPatternMatchable.regress \
FullyRetractableTo.regress \
FunctionalSpecialFunction.regress \
FunctionCalled.regress \
FunctionFieldCategory.regress \
FunctionFieldCategoryFunctions2.regress \
FunctionFieldIntegralBasis.regress \
FunctionSpace.regress \
FunctionSpaceAssertions.regress \
FunctionSpaceAttachPredicates.regress \
FunctionSpaceComplexIntegration.regress \
FunctionSpaceFunctions2.regress \
FunctionSpaceIntegration.regress \
FunctionSpacePrimitiveElement.regress \
FunctionSpaceReduce.regress \
FunctionSpaceSum.regress \
FunctionSpaceToExponentialExpansion.regress \
FunctionSpaceToUnivariatePowerSeries.regress \
FunctionSpaceUnivariatePolynomialFactor.regress \
GaloisGroupFactorizer.regress \
GaloisGroupFactorizationUtilities.regress \
GaloisGroupPolynomialUtilities.regress \
GaloisGroupUtilities.regress \
GaussianFactorizationPackage.regress \
GcdDomain.regress \
GeneralDistributedMultivariatePolynomial.regress \

```

```

GeneralHenselPackage.regress \
GeneralizedMultivariateFactorize.regress \
GeneralModulePolynomial.regress \
GeneralPackageForAlgebraicFunctionField.regress \
GeneralPolynomialGcdPackage.regress \
GeneralSparseTable.regress \
GenericNonAssociativeAlgebra.regress \
GeneralPolynomialSet.regress \
GeneralTriangularSet.regress \
GeneralUnivariatePowerSeries.regress \
GenerateUnivariatePowerSeries.regress \
GenExEuclid.regress \
GenUFactorize.regress \
GenusZeroIntegration.regress \
GnuDraw.regress \
GosperSummationMethod.regress \
GradedAlgebra.regress \
GradedModule.regress \
GraphicsDefaults.regress \
GraphImage.regress \
Graphviz.regress \
GrayCode.regress \
GroebnerFactorizationPackage.regress \
GroebnerInternalPackage.regress \
GroebnerPackage.regress \
GroebnerSolve.regress \
Group.regress \
Guess.regress \
GuessAlgebraicNumber.regress \
GuessFinite.regress \
GuessFiniteFunctions.regress \
GuessInteger.regress \
GuessOption.regress \
GuessOptionFunctions0.regress \
GuessPolynomial.regress \
GuessUnivariatePolynomial.regress \
HallBasis.regress \
HashTable.regress \
Heap.regress \
HeuGcd.regress \
HexadecimalExpansion.regress \
HTMLFormat.regress \
HomogeneousAggregate.regress \
HomogeneousDirectProduct.regress \
HomogeneousDistributedMultivariatePolynomial.regress \
HyperbolicFunctionCategory.regress \
HyperellipticFiniteDivisor.regress \
IdealDecompositionPackage.regress \
IncrementingMaps.regress \
IndexCard.regress \
IndexedAggregate.regress \
IndexedBits.regress \
IndexedDirectProductAbelianGroup.regress \
IndexedDirectProductAbelianMonoid.regress \

```

```

IndexedDirectProductCategory.regress \
IndexedDirectProductObject.regress \
IndexedDirectProductOrderedAbelianMonoid.regress \
IndexedDirectProductOrderedAbelianMonoidSup.regress \
IndexedExponents.regress \
IndexedFlexibleArray.regress \
IndexedList.regress \
IndexedMatrix.regress \
IndexedOneDimensionalArray.regress \
IndexedString.regress \
IndexedTwoDimensionalArray.regress \
IndexedVector.regress \
InfClsPt.regress \
InfiniteProductCharacteristicZero.regress \
InfiniteProductFiniteField.regress \
InfiniteProductPrimeField.regress \
InfiniteTuple.regress \
InfiniteTupleFunctions2.regress \
InfiniteTupleFunctions3.regress \
InfinitelyClosePoint.regress \
InfinitelyClosePointCategory.regress \
InfinitelyClosePointOverPseudoAlgebraicClosureOfFiniteField.regress \
Infinity.regress \
InnerAlgebraicNumber.regress \
InnerAlgFactor.regress \
InnerCommonDenominator.regress \
InnerEvalable.regress \
InnerFiniteField.regress \
InnerFreeAbelianMonoid.regress \
InnerIndexedTwoDimensionalArray.regress \
InnerMatrixLinearAlgebraFunctions.regress \
InnerMatrixQuotientFieldFunctions.regress \
InnerModularGcd.regress \
InnerMultFact.regress \
InnerNormalBasisFieldFunctions.regress \
InnerNumericEigenPackage.regress \
InnerNumericFloatSolvePackage.regress \
InnerPAdicInteger.regress \
InnerPolySign.regress \
InnerPolySum.regress \
InnerPrimeField.regress \
InnerSparseUnivariatePowerSeries.regress \
InnerTable.regress \
InnerTaylorSeries.regress \
InnerTrigonometricManipulations.regress \
InputForm.regress \
InputFormFunctions1.regress \
Integer.regress \
IntegerCombinatoricFunctions.regress \
IntegerBits.regress \
IntegerFactorizationPackage.regress \
IntegerLinearDependence.regress \
IntegerMod.regress \
IntegerNumberSystem.regress \

```

```

IntegerNumberTheoryFunctions.regress \
IntegerPrimesPackage.regress \
IntegerRetractions.regress \
IntegerRoots.regress \
IntegerSolveLinearPolynomialEquation.regress \
IntegralBasisTools.regress \
IntegralBasisPolynomialTools.regress \
IntegralDomain.regress \
IntegrationFunctionsTable.regress \
IntegrationResult.regress \
IntegrationResultFunctions2.regress \
IntegrationResultRFToFunction.regress \
IntegrationResultToFunction.regress \
IntegrationTools.regress \
InterfaceGroebnerPackage.regress \
InternalPrintPackage.regress \
InternalRationalUnivariateRepresentationPackage.regress \
InterpolateFormsPackage.regress \
IntersectionDivisorPackage.regress \
Interval.regress \
IntervalCategory.regress \
InverseLaplaceTransform.regress \
IrredPolyOverFiniteField.regress \
IrrRepSymNatPackage.regress \
JacobiIdentityAttribute.regress \
Kernel.regress \
KernelFunctions2.regress \
KeyedAccessFile.regress \
KeyedDictionary.regress \
Kovacic.regress \
LaplaceTransform.regress \
LaurentPolynomial.regress \
LazyRepresentationAttribute.regress \
LazyStreamAggregate.regress \
LazardSetSolvingPackage.regress \
LeadingCoefDetermination.regress \
LeftAlgebra.regress \
LeftModule.regress \
LeftUnitaryAttribute.regress \
LexTriangularPackage.regress \
Library.regress \
LieAlgebra.regress \
LieExponentials.regress \
LiePolynomial.regress \
LieSquareMatrix.regress \
LinearDependence.regress \
LinearlyExplicitRingOver.regress \
LinearAggregate.regress \
LinearOrdinaryDifferentialOperator.regress \
LinearOrdinaryDifferentialOperator1.regress \
LinearOrdinaryDifferentialOperator2.regress \
LinearOrdinaryDifferentialOperatorCategory.regress \
LinearOrdinaryDifferentialOperatorFactorizer.regress \
LinearOrdinaryDifferentialOperatorsOps.regress \

```

```

LinearPolynomialEquationByFractions.regress \
LinearSystemFromPowerSeriesPackage.regress \
LinearSystemMatrixPackage.regress \
LinearSystemMatrixPackage1.regress \
LinearSystemPolynomialPackage.regress \
LinesOpPack.regress \
LinGroebnerPackage.regress \
LiouvillianFunction.regress \
LiouvillianFunctionCategory.regress \
List.regress \
ListAggregate.regress \
ListFunctions2.regress \
ListFunctions3.regress \
ListMonoidOps.regress \
ListMultiDictionary.regress \
ListToMap.regress \
LocalAlgebra.regress \
Localize.regress \
LocalParametrizationOfSimplePointPackage.regress \
LocalPowerSeriesCategory.regress \
Logic.regress \
LyndonWord.regress \
MachineComplex.regress \
MachineFloat.regress \
MachineInteger.regress \
Magma.regress \
MakeBinaryCompiledFunction.regress \
MakeFloatCompiledFunction.regress \
MakeRecord.regress \
MakeUnaryCompiledFunction.regress \
MathMLFormat.regress \
MakeCachableSet.regress \
MakeFunction.regress \
MappingPackage1.regress \
MappingPackage2.regress \
MappingPackage3.regress \
MappingPackageInternalHacks1.regress \
MappingPackageInternalHacks2.regress \
MappingPackageInternalHacks3.regress \
Matrix.regress \
MatrixCategory.regress \
MatrixCategoryFunctions2.regress \
MatrixCommonDenominator.regress \
MatrixLinearAlgebraFunctions.regress \
MatrixManipulation.regress \
MergeThing.regress \
MeshCreationRoutinesForThreeDimensions.regress \
ModMonic.regress \
ModularDistinctDegreeFactorizer.regress \
ModularField.regress \
ModularHermitianRowReduction.regress \
ModularRing.regress \
Module.regress \
ModuleMonomial.regress \

```

```

ModuleOperator.regress \
MoebiusTransform.regress \
Monad.regress \
MonadWithUnit.regress \
MonogenicAlgebra.regress \
MonogenicLinearOperator.regress \
Monoid.regress \
MonoidRing.regress \
MonoidRingFunctions2.regress \
MonomialExtensionTools.regress \
MoreSystemCommands.regress \
MPolyCatFunctions2.regress \
MPolyCatFunctions3.regress \
MPolyCatPolyFactorizer.regress \
MPolyCatRationalFunctionFactorizer.regress \
MRationalFactorize.regress \
MultFiniteFactorize.regress \
MultiDictionary.regress \
MultipleMap.regress \
MultiplicativeValuationAttribute.regress \
Multiset.regress \
MultisetAggregate.regress \
MultiVariableCalculusFunctions.regress \
MultivariateFactorize.regress \
MultivariatePolynomial.regress \
MultivariateSquareFree.regress \
MultivariateTaylorSeriesCategory.regress \
MyExpression.regress \
MyUnivariatePolynomial.regress \
NAGLinkSupportPackage.regress \
NeitherSparseOrDensePowerSeries.regress \
NewSparseMultivariatePolynomial.regress \
NewSparseUnivariatePolynomial.regress \
NewSparseUnivariatePolynomialFunctions2.regress \
NewtonInterpolation.regress \
NewtonPolygon.regress \
NonAssociativeAlgebra.regress \
NonAssociativeRing.regress \
NonAssociativeRng.regress \
NonCommutativeOperatorDivision.regress \
None.regress \
NoneFunctions1.regress \
NonLinearFirstOrderODESolver.regress \
NonLinearSolvePackage.regress \
NonNegativeInteger.regress \
NormalizationPackage.regress \
NormalizedTriangularSetCategory.regress \
NormInMonogenicAlgebra.regress \
NormRetractPackage.regress \
NoetherianAttribute.regress \
NottinghamGroup.regress \
NoZeroDivisorsAttribute.regress \
NPCoef.regress \
NullSquareAttribute.regress \

```

```

NumberFieldIntegralBasis.regress \
NumberFormats.regress \
NumberTheoreticPolynomialFunctions.regress \
Numeric.regress \
NumericalIntegrationCategory.regress \
NumericalIntegrationProblem.regress \
NumericalODEProblem.regress \
NumericalOptimizationCategory.regress \
NumericalOptimizationProblem.regress \
NumericalOrdinaryDifferentialEquations.regress \
NumericalPDEProblem.regress \
NumericalQuadrature.regress \
NumericComplexEigenPackage.regress \
NumericContinuedFraction.regress \
NumericRealEigenPackage.regress \
NumericTubePlot.regress \
Octonion.regress \
OctonionCategory.regress \
OctonionCategoryFunctions2.regress \
ODEIntegration.regress \
ODEIntensityFunctionsTable.regress \
ODETools.regress \
OneDimensionalArray.regress \
OneDimensionalArrayAggregate.regress \
OneDimensionalArrayFunctions2.regress \
OnePointCompletion.regress \
OnePointCompletionFunctions2.regress \
OpenMath.regress \
OpenMathConnection.regress \
OpenMathDevice.regress \
OpenMathEncoding.regress \
OpenMathError.regress \
OpenMathErrorKind.regress \
OpenMathPackage.regress \
OpenMathServerPackage.regress \
OperationsQuery.regress \
Operator.regress \
OppositeMonogenicLinearOperator.regress \
OrderedAbelianGroup.regress \
OrderedAbelianMonoid.regress \
OrderedAbelianMonoidSup.regress \
OrderedAbelianSemiGroup.regress \
OrderedCancellationAbelianMonoid.regress \
OrderedCompletion.regress \
OrderedCompletionFunctions2.regress \
OrderedDirectProduct.regress \
OrderedFinite.regress \
OrderedFreeMonoid.regress \
OrderedIntegralDomain.regress \
OrderedMonoid.regress \
OrderedMultisetAggregate.regress \
OrderedRing.regress \
OrderedSet.regress \
OrderedVariableList.regress \

```

```

OrderingFunctions.regress \
OrderlyDifferentialPolynomial.regress \
OrderlyDifferentialVariable.regress \
OrdinaryDifferentialEquationsSolverCategory.regress \
OrdinaryDifferentialRing.regress \
OrdinaryWeightedPolynomials.regress \
OrdSetInts.regress \
OrthogonalPolynomialFunctions.regress \
OutputForm.regress \
OutputPackage.regress \
PackageForAlgebraicFunctionField.regress \
PackageForAlgebraicFunctionFieldOverFiniteField.regress \
PackageForPoly.regress \
PadeApproximantPackage.regress \
PadeApproximants.regress \
PAAdicInteger.regress \
PAAdicIntegerCategory.regress \
PAAdicRational.regress \
PAAdicRationalConstructor.regress \
PAAdicWildFunctionFieldIntegralBasis.regress \
Palette.regress \
ParadoxicalCombinatorsForStreams.regress \
ParametricLinearEquations.regress \
ParametricPlaneCurve.regress \
ParametricPlaneCurveFunctions2.regress \
ParametricSpaceCurve.regress \
ParametricSpaceCurveFunctions2.regress \
ParametricSurface.regress \
ParametricSurfaceFunctions2.regress \
ParametrizationPackage.regress \
PartialDifferentialEquationsSolverCategory.regress \
PartialDifferentialRing.regress \
PartialFraction.regress \
PartialFractionPackage.regress \
PartiallyOrderedSetAttribute.regress \
PartialTranscendentalFunctions.regress \
Partition.regress \
PartitionsAndPermutations.regress \
Pattern.regress \
Patternable.regress \
PatternFunctions1.regress \
PatternFunctions2.regress \
PatternMatch.regress \
PatternMatchable.regress \
PatternMatchAssertions.regress \
PatternMatchFunctionSpace.regress \
PatternMatchIntegerNumberSystem.regress \
PatternMatchIntegration.regress \
PatternMatchKernel.regress \
PatternMatchListAggregate.regress \
PatternMatchListResult.regress \
PatternMatchPolynomialCategory.regress \
PatternMatchPushDown.regress \
PatternMatchQuotientFieldCategory.regress \

```



```

PatternMatchResult.regress \
PatternMatchResultFunctions2.regress \
PatternMatchSymbol.regress \
PatternMatchTools.regress \
PermutationGroupExamples.regress \
PendantTree.regress \
Permanent.regress \
Permutation.regress \
PermutationCategory.regress \
PermutationGroup.regress \
Pi.regress \
PiCoercions.regress \
Places.regress \
PlacesCategory.regress \
PlacesOverPseudoAlgebraicClosureOfFiniteField.regress \
PlaneAlgebraicCurvePlot.regress \
Plcs.regress \
Plot.regress \
Plot3D.regress \
PlotFunctions1.regress \
PointFunctions2.regress \
PlottablePlaneCurveCategory.regress \
PlottableSpaceCurveCategory.regress \
PlotTools.regress \
PoincareBirkhoffWittLyndonBasis.regress \
Point.regress \
PointCategory.regress \
PointPackage.regress \
PointsOfFiniteOrder.regress \
PointsOfFiniteOrderRational.regress \
PointsOfFiniteOrderTools.regress \
PolToPol.regress \
PolyGroebner.regress \
Polynomial.regress \
PolynomialAN2Expression.regress \
PolynomialCategory.regress \
PolynomialCategoryLifting.regress \
PolynomialCategoryQuotientFunctions.regress \
PolynomialComposition.regress \
PolynomialDecomposition.regress \
PolynomialFactorizationByRecursion.regress \
PolynomialFactorizationByRecursionUnivariate.regress \
PolynomialFactorizationExplicit.regress \
PolynomialFunctions2.regress \
PolynomialGcdPackage.regress \
PolynomialIdeals.regress \
PolynomialInterpolation.regress \
PolynomialInterpolationAlgorithms.regress \
PolynomialNumberTheoryFunctions.regress \
PolynomialPackageForCurve.regress \
PolynomialRing.regress \
PolynomialRoots.regress \
PolynomialSetCategory.regress \
PolynomialSetUtilitiesPackage.regress \

```

```

PolynomialSolveByFormulas.regress \
PolynomialSquareFree.regress \
PolynomialToUnivariatePolynomial.regress \
PositiveInteger.regress \
PowerSeriesCategory.regress \
PowerSeriesLimitPackage.regress \
PrecomputedAssociatedEquations.regress \
PrimeField.regress \
PrimitiveArray.regress \
PrimitiveArrayFunctions2.regress \
PrimitiveElement.regress \
PrimitiveFunctionCategory.regress \
PrimitiveRatDE.regress \
PrimitiveRatRicDE.regress \
PrincipalIdealDomain.regress \
PrintPackage.regress \
PriorityQueueAggregate.regress \
Product.regress \
ProjectiveAlgebraicSetPackage.regress \
ProjectivePlane.regress \
ProjectivePlaneOverPseudoAlgebraicClosureOfFiniteField.regress \
ProjectiveSpace.regress \
ProjectiveSpaceCategory.regress \
PseudoAlgebraicClosureOfAlgExtOfRationalNumber.regress \
PseudoAlgebraicClosureOfAlgExtOfRationalNumberCategory.regress \
PseudoAlgebraicClosureOfFiniteField.regress \
PseudoAlgebraicClosureOfFiniteFieldCategory.regress \
PseudoAlgebraicClosureOfPerfectFieldCategory.regress \
PseudoAlgebraicClosureOfRationalNumber.regress \
PseudoAlgebraicClosureOfRationalNumberCategory.regress \
PseudoLinearNormalForm.regress \
PseudoRemainderSequence.regress \
PureAlgebraicIntegration.regress \
PureAlgebraicLODE.regress \
PushVariables.regress \
QuadraticForm.regress \
QuasiAlgebraicSet.regress \
QuasiAlgebraicSet2.regress \
QuasiComponentPackage.regress \
Quaternion.regress \
QuaternionCategory.regress \
QuaternionCategoryFunctions2.regress \
QueryEquation.regress \
Queue.regress \
QueueAggregate.regress \
QuotientFieldCategory.regress \
QuotientFieldCategoryFunctions2.regress \
RadicalCategory.regress \
RadicalEigenPackage.regress \
RadicalFunctionField.regress \
RadicalSolvePackage.regress \
RadixExpansion.regress \
RadixUtilities.regress \
RandomDistributions.regress \

```

```

RandomFloatDistributions.regress \
RandomIntegerDistributions.regress \
RandomNumberSource.regress \
RationalFactorize.regress \
RationalFunction.regress \
RationalFunctionDefiniteIntegration.regress \
RationalFunctionFactor.regress \
RationalFunctionFactorizer.regress \
RationalFunctionIntegration.regress \
RationalFunctionLimitPackage.regress \
RationalFunctionSign.regress \
RationalFunctionSum.regress \
RationalIntegration.regress \
RationalInterpolation.regress \
RationalLODE.regress \
RationalRetractions.regress \
RationalRicDE.regress \
RationalUnivariateRepresentationPackage.regress \
RealClosedField.regress \
RealClosure.regress \
RealConstant.regress \
RealNumberSystem.regress \
RealPolynomialUtilitiesPackage.regress \
RealRootCharacterizationCategory.regress \
RealSolvePackage.regress \
RealZeroPackage.regress \
RealZeroPackageQ.regress \
RectangularMatrix.regress \
RectangularMatrixCategory.regress \
RectangularMatrixCategoryFunctions2.regress \
RecurrenceOperator.regress \
RecursiveAggregate.regress \
RecursivePolynomialCategory.regress \
ReducedDivisor.regress \
ReduceLODE.regress \
ReductionOfOrder.regress \
Reference.regress \
RegularChain.regress \
RegularSetDecompositionPackage.regress \
RegularTriangularSet.regress \
RegularTriangularSetCategory.regress \
RegularTriangularSetGcdPackage.regress \
RepeatedDoubling.regress \
RepeatedSquaring.regress \
RepresentationPackage1.regress \
RepresentationPackage2.regress \
ResidueRing.regress \
ResolveLatticeCompletion.regress \
Result.regress \
RetractableTo.regress \
RetractSolvePackage.regress \
RewriteRule.regress \
RightModule.regress \
RightOpenIntervalRootCharacterization.regress \

```

```

RightUnitaryAttribute.regress \
Ring.regress \
Rng.regress \
RomanNumeral.regress \
RootsFindingPackage.regress \
RoutinesTable.regress \
RuleCalled.regress \
Ruleset.regress \
SAERationalFunctionAlgFactor.regress \
ScriptFormulaFormat.regress \
ScriptFormulaFormat1.regress \
Segment.regress \
SegmentBindingFunctions2.regress \
SegmentCategory.regress \
SegmentExpansionCategory.regress \
SegmentFunctions2.regress \
SemiGroup.regress \
Set.regress \
SetAggregate.regress \
SetCategory.regress \
SetCategoryWithDegree.regress \
SetOfMIntegersInOneToN.regress \
SequentialDifferentialPolynomial.regress \
SequentialDifferentialVariable.regress \
SExpression.regress \
SExpressionCategory.regress \
SExpressionOf.regress \
ShallowlyMutableAttribute.regress \
SimpleAlgebraicExtension.regress \
SimpleAlgebraicExtensionAlgFactor.regress \
SimpleCell.regress \
SimpleFortranProgram.regress \
SingleInteger.regress \
SingletonAsOrderedSet.regress \
SimplifyAlgebraicNumberConvertPackage.regress \
SmithNormalForm.regress \
SortedCache.regress \
SortPackage.regress \
SparseEchelonMatrix.regress \
SparseTable.regress \
SparseMultivariatePolynomial.regress \
SparseMultivariateTaylorSeries.regress \
SparseUnivariateLaurentSeries.regress \
SparseUnivariatePolynomial.regress \
SparseUnivariatePolynomialExpressions.regress \
SparseUnivariatePolynomialFunctions2.regress \
SparseUnivariatePuisseuxSeries.regress \
SparseUnivariateSkewPolynomial.regress \
SparseUnivariateTaylorSeries.regress \
SpecialFunctionCategory.regress \
SpecialOutputPackage.regress \
SplitHomogeneousDirectProduct.regress \
SplittingNode.regress \
SplittingTree.regress \

```

```

SquareMatrix.regress \
SquareFreeNormalizedTriangularSetCategory.regress \
SquareFreeQuasiComponentPackage.regress \
SquareFreeRegularSetDecompositionPackage.regress \
SquareFreeRegularTriangularSet.regress \
SquareFreeRegularTriangularSetCategory.regress \
SquareFreeRegularTriangularSetGcdPackage.regress \
SquareMatrixCategory.regress \
Stack.regress \
StackAggregate.regress \
StepThrough.regress \
StochasticDifferential.regress \
StorageEfficientMatrixOperations.regress \
Stream.regress \
StreamAggregate.regress \
StreamFunctions1.regress \
StreamFunctions2.regress \
StreamFunctions3.regress \
StreamInfiniteProduct.regress \
StreamTaylorSeriesOperations.regress \
StreamTensor.regress \
StreamTranscendentalFunctions.regress \
StreamTranscendentalFunctionsNonCommutative.regress \
String.regress \
StringAggregate.regress \
StringCategory.regress \
StringTable.regress \
StructuralConstantsPackage.regress \
SturmHabichtPackage.regress \
SubResultantPackage.regress \
SubSpace.regress \
SubSpaceComponentProperty.regress \
SuchThat.regress \
SupFractionFactorizer.regress \
Switch.regress \
Symbol.regress \
SymbolTable.regress \
SymmetricFunctions.regress \
SymmetricGroupCombinatoricFunctions.regress \
SymmetricPolynomial.regress \
SystemODESolver.regress \
SystemSolvePackage.regress \
Table.regress \
TableAggregate.regress \
Tableau.regress \
TableauxBumpers.regress \
TabulatedComputationPackage.regress \
TangentExpansions.regress \
TaylorSeries.regress \
TaylorSolve.regress \
TemplateUtilities.regress \
TexFormat.regress \
TexFormat1.regress \
TextFile.regress \

```

```

TheSymbolTable.regress \
ThreeDimensionalMatrix.regress \
ThreeDimensionalViewport.regress \
ThreeSpace.regress \
ThreeSpaceCategory.regress \
ToolsForSign.regress \
TopLevelDrawFunctions.regress \
TopLevelDrawFunctionsForAlgebraicCurves.regress \
TopLevelDrawFunctionsForCompiledFunctions.regress \
TopLevelDrawFunctionsForPoints.regress \
TopLevelThreeSpace.regress \
TranscendentalFunctionCategory.regress \
TranscendentalHermiteIntegration.regress \
TranscendentalIntegration.regress \
TranscendentalManipulations.regress \
TranscendentalRischDE.regress \
TranscendentalRischDESystem.regress \
TransSolvePackage.regress \
TransSolvePackageService.regress \
Tree.regress \
TriangularSetCategory.regress \
TriangularMatrixOperations.regress \
TrigonometricFunctionCategory.regress \
TrigonometricManipulations.regress \
TubePlot.regress \
TubePlotTools.regress \
Tuple.regress \
TwoDimensionalArray.regress \
TwoDimensionalArrayCategory.regress \
TwoDimensionalPlotClipping.regress \
TwoFactorize.regress \
UnaryRecursiveAggregate.regress \
UniqueFactorizationDomain.regress \
UnitsKnownAttribute.regress \
UnivariateFactorize.regress \
UnivariateFormalPowerSeries.regress \
UnivariateFormalPowerSeriesFunctions.regress \
UnivariateLaurentSeries.regress \
UnivariateLaurentSeriesCategory.regress \
UnivariateLaurentSeriesConstructor.regress \
UnivariateLaurentSeriesConstructorCategory.regress \
UnivariateLaurentSeriesFunctions2.regress \
UnivariatePolynomial.regress \
UnivariatePolynomialCategory.regress \
UnivariatePolynomialCategoryFunctions2.regress \
UnivariatePolynomialCommonDenominator.regress \
UnivariatePolynomialDecompositionPackage.regress \
UnivariatePolynomialDivisionPackage.regress \
UnivariatePolynomialFunctions2.regress \
UnivariatePolynomialMultiplicationPackage.regress \
UnivariatePolynomialSquareFree.regress \
UnivariatePowerSeriesCategory.regress \
UnivariatePuisseuxSeries.regress \
UnivariatePuisseuxSeriesCategory.regress \

```

```

UnivariatePuisseuxSeriesConstructor.regress \
UnivariatePuisseuxSeriesConstructorCategory.regress \
UnivariatePuisseuxSeriesFunctions2.regress \
UnivariatePuisseuxSeriesWithExponentialSingularity.regress \
UnivariateSkewPolynomial.regress \
UnivariateSkewPolynomialCategory.regress \
UnivariateSkewPolynomialCategoryOps.regress \
UnivariateTaylorSeries.regress \
UnivariateTaylorSeriesCZero.regress \
UnivariateTaylorSeriesCategory.regress \
UnivariateTaylorSeriesFunctions2.regress \
UnivariateTaylorSeriesODESolver.regress \
UniversalSegment.regress \
UniversalSegmentFunctions2.regress \
UserDefinedPartialOrdering.regress \
UserDefinedVariableOrdering.regress \
UTSodetools.regress \
U8Matrix.regress \
U16Matrix.regress \
U32Matrix.regress \
U32VectorPolynomialOperations.regress \
U8Vector.regress \
U16Vector.regress \
U32Vector.regress \
Variable.regress \
Vector.regress \
VectorCategory.regress \
VectorFunctions2.regress \
VectorSpace.regress \
ViewDefaultsPackage.regress \
ViewportPackage.regress \
Void.regress \
WeightedPolynomials.regress \
WeierstrassPreparation.regress \
WildFunctionFieldIntegralBasis.regress \
WuWenTsunTriangularSet.regress \
XAlgebra.regress \
XDistributedPolynomial.regress \
XExponentialPackage.regress \
XFreeAlgebra.regress \
XPBWPolynomial.regress \
XPolynomial.regress \
XPolynomialRing.regress \
XPolynomialsCat.regress \
XRecursivePolynomial.regress \
ZeroDimensionalSolvePackage.regress
# these requires graphics
# TwoDimensionalViewport

%.regress: %.input
@ echo sa14 algebra regression testing $*
@ rm -f $*.output
@ if [ -z "${NOISE}" ] ; then \
    echo ')read $*.input' | ${TESTSYS} ; \

```

```

else \
    echo ')read $*.input' | ${TESTSYS} >${TMP}/trace ; \
fi
@ rm $*.input
@ if [ -z "${NOISE}" ] ; then \
    echo ')lisp (regress "$*.output")' | ${TESTSYS} \
        | egrep -v '(Timestamp|Version)' | tee $*.regress ; \
else \
    echo ')lisp (regress "$*.output")' | ${TESTSYS} \
        | egrep -v '(Timestamp|Version)' > $*.regress ; \
fi
@ fgrep "regression result" $*.regress

all: announce ${REGRESS} finish
@echo sa15 algebra test cases complete.

announce:
@ echo =====
@ echo src/algebra RUNNING REGRESSION TESTING bookvol10
@ echo =====

finish:
@ echo =====
@ echo src/algebra RUNNING REGRESSION FINISH bookvol10
@ echo =====

```

1.12 The Makefile

— Makefile —

```

\getchunk{environment}

\getchunk{layer0 bootstrap}
\getchunk{layer0 copy}
\getchunk{layer0}
\getchunk{layer1}
\getchunk{layer2}
\getchunk{layer3}
\getchunk{layer4}
\getchunk{layer5}
\getchunk{layer6}
\getchunk{layer7}
\getchunk{layer8}
\getchunk{layer9}
\getchunk{layer10}
\getchunk{layer11}
\getchunk{layer12}
\getchunk{layer13}

```



```

\getchunk{layer14}
\getchunk{layer15}
\getchunk{layer16}
\getchunk{layer17}
\getchunk{layer18}
\getchunk{layer19}
\getchunk{layer20}
\getchunk{layer21}
\getchunk{layer22}
\getchunk{layer23}
\getchunk{order}

all: fasthelp fastinput fastxhtml src ${OUT}/libdb.text \
    ${SPADBIN}/index.html gloss copyspad
@ echo sa16 finished ${IN}

fasthelp:
@ echo =====
@ echo src/algebra BUILDING HELP FILES bookvol10
@ echo =====
@echo sa17 making .help files with lisp
@ echo "(makeHelpFiles)" | ${LISP}

fastinput:
@ echo =====
@ echo src/algebra BUILDING INPUT FILES bookvol10
@ echo =====
@echo sa18 making .input files with lisp
@ echo "(makeInputFiles)" | ${LISP}

fastxhtml:
@ echo =====
@ echo src/algebra BUILDING XHTML FILES bookvol10
@ echo =====
@echo sa19 making .xhtml files with lisp
@ mkdir -p ${MNT}/doc
@ echo "(makeXHTMLFiles)" | ${LISP}

copyspad:
@ echo =====
@ echo src/algebra COPYING SPAD FILES TO ${OUTSPAD}
@ echo =====
@echo sa20 copying .spad files to ${OUTSPAD}
@ cp *.spad ${OUTSPAD}

\getchunk{newcode}

${SPADBIN}/index.html:
@ echo sa20 making ${SPADBIN}/index.html
@ echo "<html><head>Axiom Algebra</head><body>" >${SPADBIN}/index.html
@- (for i in ${IN}/*.pamphlet ; do \
    ${TANGLE} -R'algebra html' $$i 2>/dev/null | \
        sed -e 's?DOC?${DOC}?g' >>${SPADBIN}/index.html ; \
    done)

```

```

@ echo "</body></html>" >>${SPADBIN}/index.html

gloss:
@ echo sa21 copying glossary files
@ cp ${SRC}/share/algebra/gloss.text ${MNT}/${SYS}/algebra
@ cp ${SRC}/share/algebra/glossdef.text ${MNT}/${SYS}/algebra
@ cp ${SRC}/share/algebra/glosskey.text ${MNT}/${SYS}/algebra

everything: lib db cmd gloss
@ echo sa22 invoking make in 'pwd' with parms:
@ echo SYS= ${SYS} LSP= ${LSP} PART= ${PART} SUBPART= ${SUBPART}
@ echo SPAD= ${SPAD} SRC= ${SRC} INT= ${INT}
@ echo OBJ= ${OBJ} MNT= ${MNT} O=${O} LISP=${LISP} BYE=${BYE}

src: announce ${ORDER}
@ echo sa23 Finished uilding nrlibS from spad sources

announce:
@ echo =====
@ echo src/algebra BUILDING ALGEBRA FILES bookvol10
@ echo =====

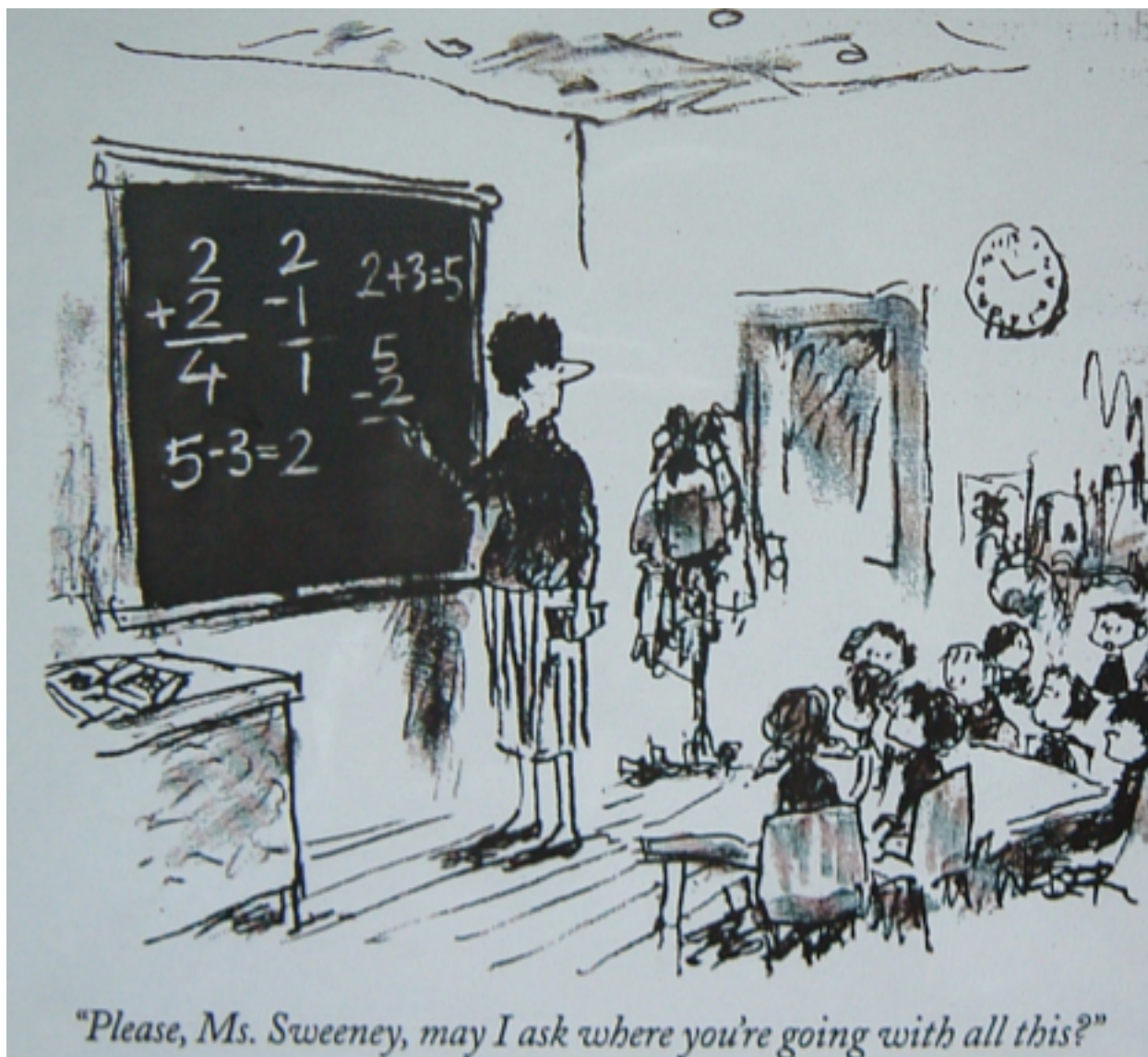
\getchunk{genericRules}
\getchunk{ps (DOC from SRC)}
\getchunk{libdb.text (OUT from IN)}
\getchunk{stages}

clean:
@echo sa24 src/algebra cleaned

```

Chapter 2

Algebra Background



”source: Kaisler[Kais09] Complex Adaptive Systems”

2.1 How NAG Libraries were used

Based on our experiences with IRENA, we decided to use generic inter-process communication tools for the link to AXIOM. This has the added advantage that we can operate across a network. The main technique we use is the *Remote Procedure Call* (RPC) [Sun Microsystems Inc., 1988] which allows us to interact with a server on another machine (or on the local machine). RPC takes care of differences in data representation (e.g. the byte-order of floating point numbers) on different architectures.

AXIOM is a multi-process package. Normally when a user starts up the system they start up the various components which then interact via standard socket operations. If they are using the line, they start up a new process: the NAG Manager (NAGMAN for short). Additionally, there will be a NAG daemon (NAGD) running on any machine on which the user may wish to execute NAG routines (which could include the local host). NAGMAN communicates with the running AXIOM system via a socket down which is transmitted the details of and data for the particular routine to be called. NAGMAN calls a NAGD on another machine via RPC and eventually returns the results to AXIOM.

NAGD consists of the server program, and a set of stub codes designed to call individual NAG routines. It is, in effect, a remotely-callable version of the NAG library. There is no reason why AXIOM should be the only system to use it, and indeed there are plans to incorporate the ability to call NAGD into other systems.

An ASP is treated just like any other piece of data by the AXIOM-NAG link. The source code is passed to NAGD and compiled. (There are various optimisations to prevent the same code being compiled multiple times, but the details needn’t concern us here.) This compiled code is linked with the NAG Library to make the executable. Thus if a user calls the same NAG routine with different ASPs the routine will be relinked each time.

It would be nice if this were not necessary. The authors of the link considered two other possibilities:

- Have AXIOM simulate the ASPs, so that the NAG Library would call back to AXIOM when it wanted to call an ASP. This was rejected as being far too slow across a network.
- Give NAGD the ability to interpret AXIOM or Fortran code. Thus the NAG routine would call a function which would evaluate a representation of an ASP to get the required values. This may happen in the future if data interchange mechanisms between systems are standardised, but was rejected for the time being since such a system would have to be tailored to match each Fortran compiler that NAGD used.

By transmitting source code for ASPs we allow the remote Fortran compiler to take care of low-level portability problems.

2.2 Algebraic Function Fields and Algebraic Geometry

Axiom implements the PAFF package by Hache[Hach95] which deals with algebraic geometry codes.

2.2.1 The Genus of a Plane Curve

From Doctor Vogler[Vogl07] and Walker[Walk78]:

Computing the genus of a curve defined by one equation is a straight-forward process. Most of this comes from Walker's book "Algebraic Curves."

Suppose you have a plane curve (let's call it C) defined by one equation

$$f(x, y) = 0$$

where $f(x, y)$ is a polynomial in two variables (x and y). Suppose that the degree of this polynomial is d . (That is, add up the exponents of x and y in each term, and take the largest sum. That's d .) Then the genus of C is **at most** $(d-1)(d-2)/2$. In fact, the genus is exactly $(d-1)(d-2)/2$ if and only if C is nonsingular.

What is a nonsingular curve? Every curve has finitely many singular points. If there are none, then the curve is nonsingular (also called smooth).

What is a singular point? Intuitively, a singular point is where something "funny" happens on the curve, such as two branches crossing ($y^2 = x^3 + x^2$) or a sharp corner ($y^2 = x^3$). Mathematically, it is where you have a simultaneous solution (in any complex numbers, not just rational numbers) to the three equations

$$f(x, y) = 0$$

$$f_x(x, y) = 0$$

$$f_y(x, y) = 0$$

That is, the polynomial function and its two partial derivatives (with respect to x and to y) are all zero. Since there are more equations in this system than variables, you **usually** have no solutions (in the sense that most real numbers are not rational, but then most numbers you encounter in math class are rational). When you **do** have solutions, then every such solution is a singular point on your curve. Not all singular points are rational points.

For example, let's find the singular points on the curve

$$x^2y^2 + 36x + 24y + 108 = 0$$

Taking derivatives with respect to x and y , we get the equations

$$2xy^2 + 36 = 0$$

$$2yx^2 + 24 = 0$$

which means that any singular point (x, y) must satisfy

$$xy^2 = -18$$

$$yx^2 = -12$$

$$y = -12/x^2$$

$$x(-12/x^2)^2 = -18$$

$$\begin{aligned} 1/x^3 &= -18/12^2 \\ x^3 &= -8 \end{aligned}$$

You might be tempted to conclude that $x = -2$, but there are actually three complex solutions to this equation. But we still need to use the third equation:

$$\begin{aligned} x^2y^2 + 36x + 24y + 108 &= 0 \\ x^2(-12/x^2)^2 + 36x + 24(-12/x^2) + 108 &= 0 \\ 144/x^2 + 36x - 288/x^2 + 108 &= 0 \\ 36x - 144/x^2 + 108 &= 0 \end{aligned}$$

And since we already know $x^3 = -8$, that means that $1/x^2 = -x/8$ and therefore

$$\begin{aligned} 36x - 144(-x/8) + 108 &= 0 \\ 36x + 18x &= -108 \\ x &= -108/54 = -2 \end{aligned}$$

(of course, this example was carefully crafted to have a rational singular point), and

$$y = -12/x^2 = -12/4 = -3$$

And then you should double-check that $(-2, -3)$ does indeed satisfy all three equations (which it does).

Each singular point reduces the genus (from the starting point of $(d-1)(d-2)/2$) by at least 1. Consequently, for example, if $d = 3$ and you have a singular point, then the genus must be 0 (because the genus is never negative). To determine exactly how much the singular point reduces the genus, you should compute the multiplicity r of the singular point. How do you compute this? Let (a, b) be your singular point (and let x, y , and t be variables), and write out the polynomial

$$f(a + xt, b + yt)$$

is a polynomial in t . The first term (coefficient of t^0) is

$$f(a, b)$$

which is 0 whenever (a, b) is a point on your curve. The next term (coefficient of t^1) is

$$(f_x(a, b)x + f_y(a, b)y)t$$

which is 0 whenever (a, b) is a singular point on your curve. The smallest integer r such that the coefficient of t^r is **not** the zero polynomial (as a polynomial in x and y) is the multiplicity of the point (a, b) . So points not on the curve have multiplicity 0, nonsingular points on the curve have multiplicity 1, and singular points have multiplicity at least 2. Each ordinary singular point reduces the genus by exactly $r(r-1)/2$.

So what is an ordinary singular point? Let's look again at the polynomial

$$f(a + xt, b + yt)$$

The coefficient of t^r is a homogeneous polynomial in x and y of degree r . (Homogeneous means that **every** term has degree r .) That means that you can write this coefficient as

$$y^r g(x/y)$$

for some polynomial g of degree at most r . If you think of the polynomial $g(z)$ as a degree- r polynomial in one complex variable z , then it has exactly r complex roots, counting multiplicity. (The multiplicity of the point at infinity is r minus the actual degree of g . Note that you can also switch x and y and get the reverse polynomial, which changes roots z to roots $1/z$, and switches 0 and infinity.) Each of these roots z gives you a tangent line to the curve, namely

$$y = z(x - a) + b$$

(or the vertical line $x = a$ when $z = \infty$). (Note that some tangent lines might be rational, in the sense that the root z is rational, but they won't always be.) The singular point is **ordinary** if all of these r tangent lines are distinct, that is, if there are no multiple roots of the polynomial $g(z)$ and its degree is either r or $r - 1$ (so that infinity is not a multiple root). Note that you can check that a polynomial has no multiple roots without computing all of the complex roots; all you need to do is take the polynomial GCD of $g(z)$ and its derivative $g'(z)$. You'll get 1 if there are no multiple roots.

Now let's compute the genus of the curve we described earlier,

$$x^2 * y^2 + 36x + 24y + 108 = 0$$

which we already determined to have exactly one singular point at $(-2, -3)$. We look at the polynomial

$$\begin{aligned} f(-2 + xt, -3 + yt) &= (-2 + xt)^2(-3 + yt)^2 + 36(-2 + xt) + 24(-3 + yt) + 108 \\ &= (9x^2 + 24xy + 4y^2)t^2 - (6yx^2 + 4xy^2)t^3 + (y^2x^2)t^4 \end{aligned}$$

and we find that the multiplicity is $r = 2$, since that is the smallest exponent of t that we see, and the tangent lines are given by the polynomial

$$g(z) = 9z^2 + 24z + 4$$

which is a quadratic with nonzero discriminant, so it has two distinct roots. Therefore, the singular point $(-2, -3)$ is ordinary, and since the degree of the curve is 4, the genus is

$$(4 - 1)(4 - 2)/2 - 2(2 - 1)/2 = 2$$

So what happens if your singular point is not ordinary? Well, then things get a little more complicated. These will still reduce the genus by at least $r(r - 1)/2$, and sometimes they

will reduce the genus by more. I'm not sure if there is a more direct way to compute the amount by which these points reduce the genus, but one way (described in Walker) is to transform the curve into another one where the singular point is ordinary. Walker describes how to transform the curve into one with the same genus but with **only** ordinary singular points. But you can actually do each singular point separately instead of all at once, which can keep things manageable when you have many non-ordinary singular points. The trick is to keep track of things.

A birational transformation from one curve C to another curve C' is a map

$$(x, y) \mapsto (x', y')$$

from points (x, y) on the curve C to points (x', y') on the curve C' , where x' and y' can each be written as a rational function of x and y (that is, a polynomial in x and y divided by another polynomial in x and y), and the inverse map

$$(x', y') \mapsto (x, y)$$

also has the same property, that x and y can each be written as rational functions of x' and y' . Such birational maps are nice because they generally map rational points on one curve to rational points on the other, but sometimes they do funny things to certain points (such as where denominators are 0) although only finitely many such points. Importantly, not all pairs of curves have birational maps between them. In fact, if two curves are birational (there exist such maps), then the two curves have the same genus. So if we can transform our curve to a birational curve with only ordinary singular points, then we can compute the genus of our original curve by computing the genus of the other one. Better yet, by watching where singular points go, we can compute the contributions of each singular point individually.

Walker does this using a quadratic transformation of homogeneous curves, so let's first convert your curve into a homogeneous one. The polynomial

$$F(X_0, X_1, X_2) = X_0^d f(X_1/X_0, X_2/X_0)$$

is a degree- d homogeneous polynomial in the three variables X_0 , X_1 , and X_2 (sometimes people use z , x , and y , but I won't in order to avoid confusing by repeating so many variable names), from which you can get f again by the formula

$$f(x, y) = F(1, x, y)$$

Dealing with your curve in the homogeneous form makes certain concepts (such as points at infinity) much more natural. In our case, the transformation that changes x to $1/x$ and y to $1/y$ can be written in terms of polynomials in the homogeneous (also called projective) variables by mapping

$$X_0 \mapsto X_2 X_1$$

$$X_1 \mapsto X_2 X_0$$

$$X_2 \mapsto X_1 X_0$$

This map causes some of those “funny things” to happen in a useful way, in certain circumstances. Those circumstances are the following:

- The point that concerns us (generally a non-ordinary singular point) is $(1, 0, 0)$ in projective coordinates.
- The points $(0, 1, 0)$ and $(0, 0, 1)$ are not on the curve.
- The line $x_0 = 0$ intersects the curve with no multiple points.
- The lines $x_1 = 0$ and $x_2 = 0$ intersect the curve with no multiple points other than $(1, 0, 0)$, which has multiplicity r .

Satisfying all of these conditions, however, only requires a bit of simple shifting of the curve. I shall first describe what happens when these conditions are satisfied, and then I’ll show you the kind of shifting to do using a couple of examples.

Recall that our curve, in projective coordinates, is defined by the homogeneous polynomial

$$F(X_0, X_1, X_2) = X_0^d f(X_1/X_0, X_2/X_0)$$

Now we will define a new function by the formula

$$G(Y_0, Y_1, Y_2) = F(Y_1 Y_2, Y_0 Y_2, Y_0 Y_1)$$

It turns out that conditions (1) and (2) guarantee that this new homogeneous polynomial is divisible by Y_0^r (where r is the multiplicity of the point $(1, 0, 0)$ on our curve). The other factor,

$$H(Y_0, Y_1, Y_2) = G(Y_0, Y_1, Y_2)/Y_0^r$$

defines a new curve, and this new curve is birational to the first by the same map, so it has the same genus. Its degree is $2d - r$, which is generally higher than d (the degree of F), but this new curve splits the singularity $(1, 0, 0)$. It also gained several new singular points, namely at $(1, 0, 0)$ and $(0, 1, 0)$ and $(0, 0, 1)$, but conditions (3) and (4) guarantee that these are ordinary singular points of multiplicity d , $d - r$, and $d - r$, respectively. Other singular points map to identical singular points, but the point $(1, 0, 0)$ splits apart. Namely, the line $Y_0 = 0$ intersects the curve $H(Y_0, Y_1, Y_2) = 0$ in two of the new singular points $(0, 1, 0)$ and $(0, 0, 1)$ and also in one point for each tangent line (namely $(0, 1, z)$ for the root z), preserving multiplicity. These points are what $(1, 0, 0)$ splits into; it splits into different points for each tangent line. For a non-ordinary point (with double tangent lines, for example), some of the multiplicity of this intersection will be caused by multiplicity of points on the curve, and some will be caused by the line being tangent to the curve. The overall effect is to reduce the number of non-ordinary singular points on your curve. You can find proofs for all of this in Walker’s book.

A “random” point will generally not lie on your curve. Similarly, a “random” point on your curve will generally not be singular. In this sense, conditions (2), (3), and (4) will usually be satisfied for a “random” curve, but condition (1) will not. So let’s say we have a (non-ordinary singular) point on our curve (a, b) and we want to move it to $(0, 0)$. So we translate the whole curve by $(-a, -b)$ by changing the defining polynomial $f(x, y)$ to

$$f(x + a, y + b)$$

(The birational maps, between our curve and the translated curve, and their inverses respectively add and subtract a and b .) Next, we homogenize by defining the homogeneous polynomial

$$F(X_0, X_1, X_2) = X_0^d f(X_1/X_0 + a, X_2/X_0 + b)$$

which now has the point in question at $(1, 0, 0)$, just like we wanted. You could also think of doing the homogenizing first, and then translate the homogenized curve by changing the homogeneous function to

$$F_2(Z_0, Z_1, Z_2) = F(Z_0, Z_1 + aZ_0, Z_2 + aZ_0).$$

After doing this, you should check if the other conditions, (2), (3), and (4), are satisfied already. If not, then you can cause them to be so by doing things like switching variables, or adding some multiple of one variable to another.

Let's do this to the curve

$$y^2 = x^3$$

If we homogenize, the curve takes the form

$$X_0X_2^2 = X_1^3$$

This has a singular point at $(1, 0, 0)$, a non-ordinary double point whose double tangent is $y = 0$. This satisfies condition (1), but the point $(0, 0, 1)$ is also on the curve, conflicting condition (2), the line $X_0 = 0$ intersects the curve with a triple point at $(0, 0, 1)$, conflicting condition (3), and the line $X_2 = 0$ intersects the curve with a triple point at $(1, 0, 0)$, conflicting condition (4), since the point $(1, 0, 0)$ has multiplicity 2, not 3.

If we set $Z_0 = X_0 + X_2$, $Z_1 = X_1$, $Z_2 = X_2$, (the inverse map is $X_0 = Z_0 - Z_2$, $X_1 = Z_1$, $X_2 = Z_2$), then our curve becomes

$$(Z_0 - Z_2)Z_2^2 = Z_1^3$$

which now satisfies conditions (1), (2), and (3), but still doesn't satisfy (4).

If we set $Z_0 = X_0 + X_2 - X_1$, $Z_1 = X_1$, $Z_2 = X_2 - X_1$, (the inverse map is $X_0 = Z_0 + Z_2 + Z_1$, $X_1 = Z_1$, $X_2 = Z_1 + Z_2$), then our curve becomes

$$(Z_0 - Z_2)(Z_1 + Z_2)^2 = Z_1^3,$$

which now satisfies all four conditions.

Then we can transform our curve by replacing Z_0 by Y_1Y_2 , Z_1 by Y_0Y_2 , and Z_2 by Y_0Y_1 , giving

$$G(Y_0, Y_1, Y_2) = (Y_1Y_2 - Y_0Y_1)(Y_0Y_2 + Y_0Y_1)^2 - (Y_0Y_2)^3$$

which, sure enough, is divisible by Y_0^2 , and the remaining curve is

$$\begin{aligned} H(Y_0, Y_1, Y_2) &= G(Y_0, Y_1, Y_2)/Y_0^2 \\ &= Y_1(Y_2 - Y_0)(Y_2 + Y_1)^2 - Y_0Y_2^3 \end{aligned}$$

You'll see the double tangent that our singular point had appearing now as the double intersection of the line $Y_0 = 0$ with our curve at the point $(0, 1, -1)$, but this is due to the line being tangent there, because the point $(0, 1, -1)$ is not a singular point on the new curve. This new curve has degree 4 and has one ordinary singular point at $(1, 0, 0)$ of multiplicity 3, which means that it has genus

$$(4-1)(4-2)/2 - 3(3-1)/2 = 0$$

There is also much to be learned about singular points by examining “places” in the form of power series representations of the curve at points on the curve, which I find to be very helpful in defining rational maps when you get zeros in the denominator (that is, in describing the “funny things” that happen). But I won't get into this here, and will instead only recommend that you read Walker's book.

2.2.2 Algebraic Curves with PAFF

This example compute the genus of the projective plane curve defined by

$$x^5 + y^2z^3 + y^4z = 0$$

over the field $GF(2)$.

First we define the field $GF(2)$.

```
K:=PF 2
```

```
(1) PrimeField(2)
```

Type: Domain

Next, we define the polynomial ring over which the polynomial is defined. You have the choice for the name of the three variables (always three !!) but the domain DMP must be used. DMP is an AXIOM domain and stands for DistributedMultivariatePolynomial.

```
R:=DMP([X,Y,Z],K)
```

```
(2) DistributedMultivariatePolynomial([X,Y,Z],PrimeField(2))
```

Type: Domain

Then we tell to the package PAFF over which field the computation must be done. Also, you must give the same list of variables which is used to defined the polynomial.

BLQT Stand for BlowUpWithQuadTrans which specified the method used for blowing-up (there will be another one using similar techniques to Hamburger-Nother expansions).

```
P:=PAFF(K,[X,Y,Z],BLQT)
```

```
(3)
```

```
PackageForAlgebraicFunctionField(PrimeField(2),[X,Y,Z],BlowUpWithQuadTrans)
```

Type: Domain

We defined now the polynomial of the curve.

```
C:=X^5 + Y^2*Z^3+Y*Z^4
```

$$(4) \quad X^5 + Y^2 Z^3 + Y Z^4$$

```
Type: DistributedMultivariatePolynomial([X,Y,Z],PrimeField(2))
```

We give it to the package PAFF($K, [X, Y, Z]$) which was assigned to the variable P

```
setCurve(C)$P
```

$$(5) \quad X^5 + Y^2 Z^3 + Y Z^4$$

```
Type: DistributedMultivariatePolynomial([X,Y,Z],PrimeField(2))
```

To compute the genus of the curve, simply do

```
genus()$P
```

$$(6) \quad 2$$

```
Type: NonNegativeInteger
```

To compute the genus, the package use the genus formula given by the blow-up theory. That means that the singular points has been computed.

```
singularPoints()$P
```

$$(7) \quad [(0:1:0)]$$

```
Type: List(ProjectivePlane(PrimeField(2)))
```

The results of `singularPoints()$P` is the list of all the singular points of the curve in the projective plane.

The Brill-Noether algorithm use the notion of “adjunction divisor”. To compute it simply do `adjunctionDivisor()$P` You should obtained something like

$$8 \cdot \%I1$$

This is a divisor of the function field of the curve, consisting of 8 times the place `%I1` which is of degree 1 (the exponent). The place `%I1` is a place above a singular point (the unique one for this example). This mean that the “desingularization tree” has been computed.

```
adjunctionDivisor()$P
```

$$(8) \quad 8 \cdot \%I1$$

```
Type: Divisor(Places(PrimeField(2)))
```

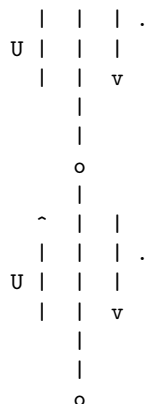
To compute the “desingularization tree” simply do: `desingTree()$P`

For this example, you should obtained from `desingTree()$P`

```
["UU.."]
```

This a list of desingularization tree for each singular point. Here there is only one, which is “UU..”. To interpret the result, you have to do some manual drawing. The letter U means “Up”, and a . (dot) means “down”.

$$\begin{array}{c} \circ \\ | \\ \sim \quad | \quad | \end{array}$$



```
desingTree()$P
```

```
(9) ["UU.."]
```

```
Type: List(DesingTree(InfClsPt(PrimeField(2), [X,Y,Z], BlowUpWithQuadTrans)))
```

To see more information about the desingularization trees, issue the command, `fullDesTree()$P`, and recall the command `desingTree()$P`. Here you have a bit more information about the infinitely near points in the desingularization trees. For this example, the result corresponds to the following



```
fullDesTree()$P
```

```
Type: Void
```

```
desingTree()$P
```

```
(11) [[name= %P0,mult= 3]([name= %I0,mult= 2]([name= %I1,mult= 1]))]
```

```
Type: List(DesingTree(InfClsPt(PrimeField(2), [X,Y,Z], BlowUpWithQuadTrans)))
```

To see everything about desingularization trees, issue the following

```
fullInfClsPt()$P
```

```
Type: Void
```

```
desingTree()$P
```

```
(13)
```

```
[
  [dominate= (0:1:0) , name= %P0, mult= 3, defCurve= X5 + Y4 + Y3 ,
    localPoint= (0:0) , chart= [exCoord= 0,affNeigh= 2], expD= 3 %I1 ]
  [dominate= (0:1:0) , name= %I0, mult= 2, defCurve= X1 + X2 Y4 + Y3 ,
    localPoint= (0:0) , chart= [exCoord= 1,affNeigh= 2], expD= 2 %I1 ]
  [dominate= (0:1:0) , name= %I1, mult= 1, defCurve= X1 + X2 Y3 + Y,
    localPoint= (0:0) , chart= [exCoord= 2,affNeigh= 2], expD= %I1 ]
]
Type: List(DesingTree(InfClsPt(PrimeField(2),[X,Y,Z],BlowUpWithQuadTrans)))
```

You can ask for all the place of degree 1

```
placesOfDegree(1)$P
```

```
(14) [[0:1:1] , [0:0:1] , %I1 ]
Type: List(Places(PrimeField(2)))
```

With those places, you can create divisors

```
listOfDiv:=placesOfDegree(1)$P :: List DIV PLACES PF 2
```

```
(15) [[0:1:1] , [0:0:1] , %I1 ]
Type: List(Divisor(Places(PrimeField(2))))
```

You can add the divisors.

```
D:=reduce(+, listOfDiv)
```

```
(16) [0:1:1] + [0:0:1] + %I1
Type: Divisor(Places(PrimeField(2)))
```

You can multiply the divisor by an integer

```
D10 := 10 * D
```

```
(17) 10 [0:1:1] + 10 [0:0:1] + 10 %I1
Type: Divisor(Places(PrimeField(2)))
```

You can ask for the degree of the divisor

```
degree D10
```

```
(18) 30
Type: PositiveInteger
```

You can compute the basis of the vector space $L(D10)$. The results is an Axiom Record. The first selector “num” corresponds to the numerators of the elements of the basis, and the

second selector “den” is the common denominator.

```
baseOfLofD:= lBasis(D10)$P
```

```
Trying to interpolate with forms of degree:
```

```
8
```

```
Denominator found
```

```
Intersection Divisor of Denominator found
```

```
(19)
```

```
[
```

```
  num =
```

```
      8   5 3   6 2       7       4 3       5 2   2 6   2 3 3   2 4 2   2 5
[Z , Y Z , Y Z , X Z , X Y Z , X Y Z , X Z , X Y Z , X Y Z , X Y Z ,
  3 5   3 2 3   3 3 2   3 4       4 4   4   3   4 2 2   4 3       4 4   5 3
X Z , X Y Z , X Y Z , X Y Z , X Z , X Y Z , X Y Z , X Y Z , X Y , X Z ,
  5   2   5 2   5 3   6 2   6       6 2   7   7   8
X Y Z , X Y Z , X Y , X Z , X Y Z , X Y , X Z , X Y , X ]
```

```
,
```

```
      5 2       5   2
den= X Y Z + X Y Z ]
```

```
Type: Record(num: List DistributedMultivariatePolynomial(...
```

Of course, the number of element in the list of numerator is the dimension of the vector space $L(D10)$. According to the Riemann-Roch Theorem, since

```
deg D10 >= 2 g - 1
```

we should have

```
dim L(D10) = deg D10 - g + 1
```

```
((# baseOfLofD.num) = degree D10 - genus()$P + 1 ) :: Boolean
```

```
(20) true
```

```
Type: Boolean
```

2.2.3 Algebraic Curves with PAFFFF

This example is to show how to compute the generator matrix of an algebraic geometric code (AG-codes, or geometric Goppa code). Here we use the same curve as the example in the previous example, that is the curve defined by

$$X^5 + Y^2 Z^3 + Y^4 Z = 0$$

NOTE THAT we will use the package PAFFFF instead of PAFF.

With PAFFFF the computation are done using dynamic extension over the FINITE ground field that is given to PAFFFF.

For example,

```
PAFFFF(K, [X,Y,Z])
```

will do computation in any finite extension of K when NEEDED ONLY, while

```
PAFF(K, [X,Y,Z])
```

only do computation over the field K and, when some extension is needed, PAFF cannot go further and stop.

In fact the difference between $\text{PAFF}(K, [X, Y, Z])$ and $\text{PAFFFF}(K, [X, Y, Z])$ is that $\text{PAFFFF}(K, [X, Y, Z])$ will do the computation using the domain

`PseudoAlgebraicClosureOfFiniteField` (abbreviation `PACOFF`)

Note that it is almost right to say that $\text{PAFFFF}(K, [X, Y, Z])$ is the same as $\text{PAFF}(\text{PACOFF}(K), [X, Y, Z])$ but $\text{PAFFFF}(K, [X, Y, Z])$ is easier to use.

We want here to construct an AG-code over the field $GF(2^4)$ and also, we want the code to be of length equal to the number of places of degree 1 of the function field of the curve. To do this we consider the following

Let F be the function field of the curve with constant field $GF(2)$

Let F_4 be the function field of the curve with constant field $GF(2^4)$ (F_4 is the field obtained from F by taking a constant field extension)

It is clear that F is a subfield of F_4 , but since $GF(2^3)$ is not a subfield of $GF(2^4)$, any place of F of degree 3 will not split in F_4 and in particular, any place of F of degree 3 is dominated by a unique place of F_4 of degree 3.

Let P be a place of degree 3 of F and Q be the unique place of F_4 above P (i.e. $Q|P$). It is well known that a basis of $L(nP)$ is a basis of $L(nQ)$ (n being an integer). Using this fact, we can construct an AG-code of length equal to the number of places of degree 1 of the function field of the curve.

First, let us find all the places of degree 3 of F . The results from PAFFFF will be something like this:

```
      2      3      2      3
[[[%D4:%D4 + 1:1] ,[%D4:%D4 :1] ]
```

What you have here is 2 places of degree 3 (the degree is given by the exponent). Also, they correspond to simple points of the curve defined in an extension of degree 3.

```
K1:= PF(2)
```

```
(1) PrimeField(2)
```

```
R1:= DMP([X,Y,Z],K1)
```

```
(2) DistributedMultivariatePolynomial([X,Y,Z],PrimeField(2))
```

```
P1:= PAFFFF(K1,[X,Y,Z],BLQT)
```

```
(3)
```

```
PackageForAlgebraicFunctionFieldOverFiniteField(PrimeField(2),
[X,Y,Z],BlowUpWithQuadTrans)
```

```
C1:R1:=X^5 + Y^2*Z^3+Y*Z^4
```

```
      5      2 3      4
(4)  X  + Y Z  + Y Z
```

```
setCurve(C1)$P1
```

$$(5) \quad X^5 + Y^2 Z^3 + Y^4 Z^4$$

```
plc3:= placesOfDegree(3)$P1
```

$$(6) \quad \left[\left[\%D5:\%D5^2 :1 \right], \left[\%D5:\%D5^2 + 1:1 \right] \right]$$

$\%D5$ is an element created by the domain **PACOFF**: it is a root of the irreducible polynomial of degree 3 that is used to define the extension of degree 3 of $GF(2)$.

To see the irreducible polynomial you can issue the following that will retrieve the first coordinate of the simple point corresponding to the first place of the list of places of degree 3.

Then we look at the defining polynomial of the element:

```
a:= elt( first % , 1 )
```

$$(7) \quad \%D5$$

```
definingPolynomial(a)
```

$$(8) \quad ?^3 + ?^2 + 1$$

$$a^3 + a^2 + 1$$

$$(9) \quad 0$$

As you can see, $\%D5$ is the root of an irreducible polynomial of degree 3.

Now we construct a divisor using the places of degree 3. It will be 2 times the sum of the 2 places of degree 3.

```
D:= 2 * reduce(+,(plc3 :: List DIV PLACESPS PF 2))
```

$$(10) \quad 2 \left[\%D5:\%D5^2 :1 \right] + 2 \left[\%D5:\%D5^2 + 1:1 \right]$$

Now we compute a basis of $L(D)$

```
lB1:= lBasis(D)$P1
```

```
Trying to interpolate with forms of degree:
```

```
4
```

```
Denominator found
```

```
Intersection Divisor of Denominator found
```

$$(11)$$

$$[\text{num} = \left[Z^4, Y^3 Z^2, Y^2 Z^3, X^3 Z^2, X^2 Y Z^2, X Y^2 Z^2, X^3 Z^3, X^2 Y Z^3, X Y^2 Z^3, X^4 \right],$$

Now, we can construct the matrix of the AG-code, which code-words consist of the evaluation of function in $L(D)$ at each places of F_4 of degree 1. Note that we call the function eval of the package *P4*: this function evaluate function at a place by taking as arguments the numerator and the denominator of a function and a place.


```

      5      5
      %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      %A , %A , 0, 0, 0]
,

      10      5      10      7      5      14      11      6      13      10      13      7      12
      [%A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      7      14      11      11      5      3      13      14      11      13      7      14      9
      %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      14      11      13      7
      %A , %A , %A , %A , 0, 0, 0]
,

      7      7      14      14      4      4      13      13      10      10      8      8
      [1, 1, %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      2      2      11      11      2      2      5      5      1      1      1      1      8      8
      %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      4      4
      %A , %A , 0, 0, 0]
,

      10      5      11      8      7      1      14      9      2      14      3      12      3
      [%A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      13      6      3      4      13      12      7      9      6      9      3      11      6
      %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A , %A ,
      12      9      12      6
      %A , %A , %A , %A , 0, 0, 0]
,

      8      8      1      1      7      7      2      2      14      14      9      9
      [1, 1, %A , %A , %A , %A , %A , %A , %A , %A , 1, 1, %A , %A , %A , %A ,
      4      4      11      11      12      12      13      13      6      6      3      3
      %A , %A , %A , %A , 1, 1, %A , %A , %A , %A , %A , %A , %A , %A ,
      0, 0, 0]
]

```

Type: Matrix(FiniteFieldCyclicGroup(2,4))

The preceding matrix is the generator matrix of a $[n, k, d]$ -code over $GF(2^4)$ where

$n = \text{nb. of places of degree } 1 = 33$

$k = \dim L(D) = \deg D - g + 1 = 11$ (since $\deg D \geq 2g - 1$)

$d \geq 33 - \deg D = 33 - 12 = 21$

In fact, if one look at the row echelon form of the matrix, they will find out that there is a code word of weight 21, so that code has a minimum distance $d = 21$. (Of course this doesn't work all the time, that we don't always find a word of minimal weight in the row echelon form of the generator matrix).

```
reduce(min, [33 - count(zero?,l) for l in listOfLists rowEchelon mG])
```

(19) 21

Let's look at a second example.

```
p:= nextPrime(2^20)
```

```
(1) 1048583
```

```
K:=PF p
```

```
(2) PrimeField(1048583)
```

```
R:=DMP([x,y,z],K)
```

```
(3) DistributedMultivariatePolynomial([x,y,z],PrimeField(1048583))
```

```
P:=PAFFFF( K, [x,y,z], BLQT)
```

```
(4)
```

```
PackageForAlgebraicFunctionFieldOverFiniteField(  
  PrimeField(1048583), [x,y,z], BlowUpWithQuadTrans)
```

```
ProjP1 := PROJPLPS PrimeField p
```

```
(5)
```

```
ProjectivePlaneOverPseudoAlgebraicClosureOfFiniteField(PrimeField(1048583))
```

```
f:R:= y^2 - (x-1)*(x-2)*(x-3)*(x-4)*(x-5)
```

```
(6) 1048582x5 + 15x4 + 1048498x3 + 225x2 + 1048309x + y2 + 120  
Type: DistributedMultivariatePolynomial([x,y,z],PrimeField(1048583))
```

```
fh:R:= homogenize( f , 3 )$P
```

```
(7) 1048582x5 + 15x4z + 1048498x3z + 225x2z2 + 1048309x4z + y2z3 + 120z5
```

```
setCurve(fh)$P
```

```
(8) 1048582x5 + 15x4z + 1048498x3z + 225x2z2 + 1048309x4z + y2z3 + 120z5
```

```
g:=genus()$P
```

```
(9) 2
```

```
divZ := intersectionDivisor(z)$P
```

```
(10) 5 %I71
```

pInf:= first supp divZ

$$(11) \quad \frac{1}{I^7}$$

p1:= projectivePoint([1,0,1] :: List K)\$ProjP1

$$(12) \quad (1:0:1)$$

pl1:= first placesAbove(p1)\$P

$$(13) \quad [1:0:1]$$

p2:= projectivePoint([2,0,1] :: List K)\$ProjP1

$$(14) \quad (2:0:1)$$

pl2:= first placesAbove(p2)\$P

$$(15) \quad [2:0:1]$$

p3:= projectivePoint([3,0,1] :: List K)\$ProjP1

$$(16) \quad (3:0:1)$$

pl3:= first placesAbove(p3)\$P

$$(17) \quad [3:0:1]$$

p4:= projectivePoint([4,0,1] :: List K)\$ProjP1

$$(18) \quad (4:0:1)$$

pl4:= first placesAbove(p4)\$P

$$(19) \quad [4:0:1]$$

p5:= projectivePoint([5,0,1] :: List K)\$ProjP1

$$(20) \quad (5:0:1)$$


```
p15:= first placesAbove( p5 )$P
```

$$(21) \quad [5:0:1]^1$$

```
D:= p11+p12+ 3*p13 - 5* pInf
```

$$(22) \quad [1:0:1]^1 + [2:0:1]^1 + 3 [3:0:1]^1 - 5 \text{ \%I7}$$

```
lb:= lBasis( D + g*pInf )$P
```

```
Trying to interpolate with forms of degree:
```

```
2
```

```
Trying to interpolate with forms of degree:
```

```
3
```

```
Denominator found
```

```
Intersection Divisor of Denominator found
```

$$(23) \quad [\text{num} = [873819x^2 y z^2 + y^3 z^2], \text{den} = 873819x^3 + x^2 z^2 + 174762x^2 z^2 + 87382y^2 z^3]$$

```
g1:= first lb.num
```

$$(24) \quad 873819x^2 y z^2 + y^3 z^2$$

```
g0:= lb.den
```

$$(25) \quad 873819x^3 + x^2 z^2 + 174762x^2 z^2 + 87382y^2 z^3$$

```
intersectionDivisor(g1)$P - intersectionDivisor(g0)$P + D
```

$$(26) \quad [5:0:1]^1 + [4:0:1]^1 - 2 \text{ \%I7}$$

2.3 Groebner Basis

Given a set of polynomials we'd like to find a 'basis set' (think of the $x - y$ axis in some polynomial space) that is, in some sense, an easier set to use.

2.3.1 How To Compute A Groebner Basis

From Verschelde[Vers16] and Norman[Normxx] we have the algorithm for computing a Groebner Basis.

Let $I = \langle f_1, f_2, \dots, f_t \rangle$. Write $F = \{f_1, f_2, \dots, f_t\}$.

S-polynomials (Subtraction polynomials)

A term is a product of a coefficient and a monomial.

The leading term of a polynomial p (under some monomial ordering, discussed below) we will call $LT(p)$.

The leading monomial of the polynomial we will call $LM(p)$.

The least common multiple of two monomials x^a and x^b we will call $LCM(x^a, x^b)$

To eliminate the leading term of two nonzero polynomials p and q , we construct the S -polynomial

$$S(p, q) = \frac{LCM(LM(p), LM(q))}{LT(p)} \cdot p - \frac{LCM(LM(p), LM(q))}{LT(q)} \cdot q$$

If p and q belong to the same ideal I the $S(p, q) \in I$.

The use of S polynomials to eliminate leading terms of multivariate polynomials generalizes the row reduction algorithm for systems of linear equations. If we take a system of homogeneous linear equations (i.e. the constant coefficient equals zero), then bringing the system into triangular form yields a Groebner basis.

Buchberger's Algorithm:

Choose a pair f_i, f_j and compute $\overline{S(f_i, f_j)}^F = h$. If this is zero, then go to the next pair. If it is not zero, adjoin h to the set F . Then start over with the enlarged F in place of the original F . If the S polynomials are zero for all pairs, then stop.

Example 1 Let $I = \langle f_1 = xy - x, f_2 = x^2 - y \rangle$. We use the lexicographic order with $x > y$.

1. We compute

$$S(f_1, f_2) = \frac{x^2 y}{xy} \cdot (xy - x) - \frac{x^2 y}{x^2} \cdot (x^2 - y) = -x^2 + y^2$$

2. We compute $\overline{S(f_1, f_2)}^F$. It is $f_3 = y^2 - y$. We adjoin this to F , so that F is now $F = \{f_1, f_2, f_3\}$.
3. We start over with the new F . It is automatic that $\overline{S(f_i, f_j)}^F = 0$. We need to compute $S(f_1, f_3)$ and $S(f_2, f_3)$.
4. We compute $S(f_1, f_3) = 0$
5. We compute $S(f_2, f_3) = x^3 - xy^2$. We compute $\overline{x^3 - xy^2}^F = 0$. Note that $F = \{f_1, f_2, f_3\}$.

We see that $\{f_1, f_2, f_3\}$ is a Groebner basis for the ideal I .

Each step creates a larger set of generators of the ideal I because we add non-zero elements to our set of generators.

Eventually we find an element in the ideal whose leading term is not divisible by any of the leading terms in our set of generators. We reach a stage where, for every pair of elements

f, g we see that $\overline{S(f, g)}^{F_m} = 0$. This means we have found a Groebner basis. However, this basis is not unique.

We can compute a unique, minimal Groebner basis by noticing that, if the $\text{leadingTerm}(p)$ is a member of the basis formed by the leadingTerms of all of the elements of the set when p is removed, then that smaller set is also a Groebner basis.

By definition, a Groebner basis G of an ideal I is a minimal basis provided it satisfies

1. $\text{leadingCoefficient}(p) = 1 \forall p \in G$
2. $\forall p \in G, \text{the leadingTerm}(p) \notin \langle \text{leadingTerm}(G - p) \rangle$

To construct this minimal bases we divide each element in the given basis by its leading coefficient. Now put the elements in some arbitrary order. If the first element in p is in $\langle \text{leadingTerm}(G - p) \rangle$ then remove it from G . Now go to the second element and perform the same operation. Once all of the elements are processed the Groebner basis is minimal (but not unique). Fixing the monomial order will guarantee a unique reduced Groebner basis.

2.3.2 Monomial Ordering

Four common monomial orderings are Lexicographic (dictionary), Degree Lexicographic, Reverse Lexicographic, and Degree Reverse Lexicographic. [Cox07]

Given

$$f = 4xy^2z + 4z^2 - 5x^3 + 7x^2z^2$$

and each monomial has the form

$$\begin{aligned} m_1 &= x_1^{i_1} \dots x_n^{i_n} \\ m_2 &= x_1^{j_1} \dots x_n^{j_n} \end{aligned}$$

In **Lexicographic** order, then $m_1 < m_2$ if

$$i_1 = j_1, \dots, i_{k-1} = j_{k-1}, i_k < j_k$$

for some k . That is $m_1 < m_2$ if the first variable with different exponents has a lower degree in m_1 than in m_2 .

Sorting f in Lexicographic order (Lex) we see

$$f = -5x^3 + 7x^2z^2 + 4xy^2z + 4z^2$$

In **Degree Lexicographic** order, then $m_1 < m_2$ if $\text{mdeg}(m_1) < \text{mdeg}(m_2)$ or if $\text{mdeg}(m_1) = \text{mdeg}(m_2)$ and $m_1 < m_2$ with respect to Lex.

Sorting f in Degree Lexicographic order (Deglex) we see

$$f = 7x^2z^2 + 4xy^2z - 5x^3 + 4z^2$$

In **Reverse Lexicographic** order, then $m_1 < m_2$ if

$$i_n = j_n, \dots, i_{k+1} = j_{k+1}, i_k > j_k > k$$

That is, $m_1 < m_2$ if the last variable with different exponents has a higher degree in m_1 than in m_2 .

Sorting f in Reverse Degree Lexicographic order (Revlex) we see

$$f = -5x^3 + xxy^2z + 4z^2 + 7x^2z^2$$

In **Degree Reverse Lexicographic** order, then $m_1 < m_2$ if $mdeg(m_1) < mdeg(m_2)$ or if $mdeg(m_1) = mdeg(m_2)$ and $m_1 < m_2$ with respect to Revlex.

Sorting f in Degree Reverse Lexicographic order (Degrevlex) we see

$$f = 4xy^2z + 7x^2z^2 = 5x^3 + 4z^2$$

2.3.3 Variable Ordering

Each monomial ordering depends **on the ordering of the variables**. For instance, Lex with the ordering $x > y > z$ is a different ordering than Lex with $y > x > z$. In the above examples, we order

$$x_1 > x_2 > \cdots > x_n$$

but this is arbitrary. For each of the four common monomial orderings we have $n!$ possible orderings.

So in Axiom, we can specify the order of the variables:

```
(1) -> f:=4*x*y^2*z + 4*z^2 - 5*x^3 + 7*x^2*z^2
      2      2      2      3
(1)  f= (7x  + 4)z  + 4x y z - 5x
                                     Type: Equation(Polynomial(Integer))
(2) -> f1:DMP([x,y,z],INT):=4*x*y^2*z + 4*z^2 - 5*x^3 + 7*x^2*z^2
      3      2 2      2      2
(2)  - 5x  + 7x z  + 4x y z + 4z
                                     Type: DistributedMultivariatePolynomial([x,y,z],Integer)
(3) -> f2:DMP([z,y,x],INT):=4*x*y^2*z + 4*z^2 - 5*x^3 + 7*x^2*z^2
      2 2      2      2      3
(3)  7z x  + 4z  + 4z y x - 5x
                                     Type: DistributedMultivariatePolynomial([z,y,x],Integer)
```

2.3.4 Combined Ordering

2.3.5 An Example Computation

Suppose we are given a set of polynomials. We choose a variable ordering (in this case $w < p < z < t < s < b$) and a coefficient field (in this case $\text{Fraction}(\text{Integer})$).

```
s1:DMP([w,p,z,t,s,b],FRAC(INT)):= 45*p + 35*s - 165*b - 36
s2:DMP([w,p,z,t,s,b],FRAC(INT)):= 35*p + 40*z + 25*t - 27*s
s3:DMP([w,p,z,t,s,b],FRAC(INT)):= 15*w + 25*p*s + 30*z - 18*t - 165*b**2
s4:DMP([w,p,z,t,s,b],FRAC(INT)):= -9*w + 15*p*t + 20*z*s
s5:DMP([w,p,z,t,s,b],FRAC(INT)):= w*p + 2*z*t - 11*b**3
```

```

s6:DMP([w,p,z,t,s,b],FRAC(INT)):= 99*w - 11*b*s + 3*b**2
s7:DMP([w,p,z,t,s,b],FRAC(INT)):= b**2 + 33/50*b + 2673/10000

sn7:=[s1,s2,s3,s4,s5,s6,s7]

```

We can compute a Groebner basis of this set asking for additional information during the process. Notice that there is "intermediate expression swell". That is, the Critpair polynomial coefficients can get very large.

Also notice that Axiom is providing information about which steps it is considering. So the line that reads:

```
[[ci= p,tci= 4,cj= p,tcj= 4,c= z,tc= 5,rc= z,trc= 5,tF= 4,tD= 3]]
```

tells us that

- **ci= p** Leading monomial for critpair calculation
- **tci= 4** Number of terms of polynomial i
- **cj= p** Leading monomial for critpair calculation
- **tcj= 4** Number of terms of polynomial j
- **c= z** Leading monomial of critpair polynomial
- **tc= 5** Number of terms of critpair polynomial
- **rc= z** Leading monomial of redcritpair polynomial
- **trc= 5** Number of terms of redcritpair polynomial
- **tF= 4** Number of polynomials in reduction list F
- **tD= 3** Number of critpairs still to do

```
groebner(sn7,"redcrit","info")
```

```
reduced Critpair - Polynom :
```

$$z + - \frac{5}{8} t - \frac{61}{45} s + \frac{77}{24} b + \frac{7}{10}$$

```
[[ci= p,tci= 4,cj= p,tcj= 4,c= z,tc= 5,rc= z,trc= 5,tF= 4,tD= 3]]
```

```
reduced Critpair - Polynom :
```

$$t s - \frac{66}{29} t b + \frac{603}{1450} t - \frac{278}{435} s + \frac{11}{29} s b - \frac{672}{725} s - \frac{2277}{7250} b - \frac{415881}{725000}$$

```
[[ci= w,tci= 3,cj= w,tcj= 5,c= p t,tc= 6,rc= t s,trc= 8,tF= 5,tD= 2]]
```

```
reduced Critpair - Polynom :
```

$$t + \frac{100}{189} s - \frac{2}{63} s b - \frac{160}{63} s - \frac{104}{105} s - \frac{37}{105} b - \frac{79}{125}$$

```
[[ci= w,tci= 3,cj= w,tcj= 3,c= p t,tc= 4,rc= t,trc= 6,tF= 5,tD= 2]]
```

reduced Critpair - Polynom :

$$s^3 - \frac{1026}{145} s^2 b - \frac{5424}{3625} s^2 - \frac{2529}{725} s b - \frac{1326807}{362500} s + \frac{12717}{6250} b + \frac{660717}{3625000}$$

[[ci= t s, tci= 8, cj= t, tcj= 6, c= t b, tc= 9, rc= s ,trc= 7, tF= 6, tD= 1]]

reduced Critpair - Polynom :

$$s^2 b + \frac{91248294}{128176525} s^2 - \frac{6550614}{5127061} s b + \frac{7087292937}{12817652500} s - \frac{20020838931}{12817652500} b$$

+
 $\frac{37595502243}{51270610000}$

[[ci= w p, tci= 3, cj= w, tcj= 3, c= p s b, tc= 4, rc= s b, trc= 6, tF= 7, tD= 2]]

reduced Critpair - Polynom :

$$s^2 - \frac{4746183626079988}{987357073521193} s b - \frac{1015195815329760}{987357073521193} s - \frac{30723564870033201}{24683926838029825} b$$

+
 $\frac{3696123458901625353}{2468392683802982500}$

$$[[ci= b^2, tci= 3, cj= s^2 b, tcj= 6, c= s^2 b, tc= 6, rc= s^2, trc= 5, tF= 6, tD= 2]]$$

reduced Critpair - Polynom :

0

$$[[ci= s^2 b, tci= 6, cj= s^2, tcj= 5, c= s^2, tc= 7, rc= 0, trc= 0, tF= 6, tD= 1]]$$

reduced Critpair - Polynom :

$$s^3 b + \frac{16827373608076633182513471}{23063714246644859914108300} s^2 b - \frac{1262793163581645698534964}{5765928561661214978527075} b$$

+
 $\frac{91594345205981119652436033}{144148214041530374463176875}$

3 2 2

```
[[ci= s ,tci= 7,cj= s ,tcj= 5,c= s b,tc= 6,rc= s b,trc= 4,tF= 7,tD= 2]]
```

```
reduced Critpair - Polynom :
```

$$s - \frac{5}{2} b - \frac{9}{200}$$

```
[[ci= b ,tci= 3,cj= s b,tcj= 4,c= s b,tc= 4,rc= s ,trc= 3,tF= 6,tD= 2]]
```

```
reduced Critpair - Polynom :
```

```
0
```

```
[[ci= s b,tci= 4,cj= s ,tcj= 3,c= s ,tc= 4,rc= 0,trc= 0,tF= 6,tD= 1]]
```

```
reduced Critpair - Polynom :
```

```
0
```

```
[[ci= s ,tci= 5,cj= s ,tcj= 3,c= s b,tc= 4,rc= 0,trc= 0,tF= 6,tD= 0]]
```

There are

```
6
```

Groebner Basis Polynomials.

THE GROEBNER BASIS POLYNOMIALS

(12)

$$\begin{aligned} &[w + \frac{19}{120} b + \frac{1323}{20000}, p - \frac{31}{18} b - \frac{153}{200}, z + \frac{49}{36} b + \frac{1143}{2000}, t - \frac{37}{15} b + \frac{27}{250}, \\ &s - \frac{5}{2} b - \frac{9}{200}, b + \frac{2}{50} b + \frac{2673}{10000}] \end{aligned}$$

2.4 Elementary Functions

2.4.1 Rationale for Branch Cuts and Identities

Perhaps one of the most vexing problems to be addressed when attempting to determine a set of mathematical function definitions is the choice of the principal branches of the inverses of the exponential, trigonometric and hyperbolic functions, and, further, the mathematical form that these functions take on their domains (the complex plane slit by the corresponding branch cuts). The fundamental issue facing the mathematical library developer is the plethora of possibilities, and while some choices are demonstrably inferior, there is rarely a

choice which is clearly best.

Following Kahan[Kaha86], we will refer to the mathematical formula we use to define the principal branch of each such function as its principal expression. For the inverse trigonometric and inverse hyperbolic functions, this principal expression is given in terms of the functions $\ln z$ and \sqrt{z} .

The choices set out in this Standard are derived from the following principles:

1. Branch cuts must lie completely within either the real or imaginary axis.
2. The principal expression must not have any singularities at finite points which the original function does not share.
3. Branch cuts end at branch points.
4. Where not otherwise determined, the value of a function on its branch cut or cuts is obtained by taking a limit along a path which approaches the branch cut in a counterclockwise manner around one of the branch points which terminate the cut (counterclockwise continuity, or CCC for short).
5. Each inverse trigonometric or hyperbolic function must be real-valued on the range of the corresponding trigonometric or hyperbolic function when restricted to the real axis.

Further explanation of these principles can be found in [1].

While standard identities such as $\ln \frac{1}{x} = -\ln x$ hold for $x > 0$, they generally fail to hold for complex arguments of principal branches, even complex arguments which do not lie on a branch cut. Consequently, a definition of, say,

$$\arctan z = \frac{i}{2}(\ln(1 - iz) - \ln(1 + iz))$$

is not the same as the apparently equivalent

$$i \ln \left(\sqrt{\frac{1 - iz}{1 + iz}} \right)$$

. It can be challenging to decide if two candidate expressions for representing an inverse trigonometric or hyperbolic function which agree in the mathematical domain are the same in the restricted computational realm of principal expressions.

If the underlying computational mathematical system supports a signed zero, as prescribed by the IEEE/754 Standard [2], then a larger set of identities will hold. For example,

$$\ln \frac{1}{z} = -\ln z$$

holds for all complex z in such a system, as do conjugate symmetry relations for functions such as $\arcsin z$. However, identities such as $\ln zw = \ln z + \ln w$ still fail to hold for some complex z and w .

A useful function for representing identities involving complex functions which are related to the logarithm function is the complex signum function, defined as:

$$\text{csgn}(z) = \begin{cases} 1, & \text{if } \Re z > 0 \text{ or } \Re z = 0 \text{ and } \Im z > 0 \\ -1, & \text{if } \Re z < 0 \text{ or } \Re z = 0 \text{ and } \Im z < 0 \end{cases}$$

The value of $\text{csgn}(0)$ is unspecified. Note, for example, that $\sqrt{z^2} = z \text{csgn}(z)$.

Using the principal expressions for each of the 12 inverse trigonometric and hyperbolic functions as given in this Standard, we have the following relations and identities:

2.4.2 Inverse trigonometric functions

| | |
|----------------------------|---|
| $\arcsin(z)$ | $= -\arcsin(-z)$ $= \frac{\pi}{2} - \arccos(z)$ $= -i\operatorname{arcsinh}(iz)$ |
| $\arccos(z)$ | $= \pi - \arccos(-z)$ $= \frac{\pi}{2} - \arcsin(z)$ $= i\operatorname{csgn}(i(z-1))\operatorname{arccosh}(z)$ |
| $\arctan(z)$ | $= -\arctan(-z)$ $= \frac{\pi}{2} - \operatorname{arccot}(z)$ $= -i\operatorname{arctanh}(iz)$ $= -i \ln \left(\frac{1+iz}{\sqrt{z^2+1}} \right)$ |
| $\operatorname{arccot}(z)$ | $= \pi - \operatorname{arccot}(-z)$ $= \frac{\pi}{2} - \arctan(z)$ $= i\operatorname{arccoth}(iz) + \frac{\pi}{2}(1 - \operatorname{csgn}(z+i))$ $= -i \ln \left(\frac{z+i}{\sqrt{z^2+1}} \right)$ |
| $\operatorname{arccsc}(z)$ | $= -\operatorname{arccsc}(-z)$ $= \arcsin\left(\frac{1}{z}\right)$ $= \frac{\pi}{2} - \operatorname{arcsec}(z)$ $= i \operatorname{arccsch}(iz)$ |
| $\operatorname{arcsec}(z)$ | $= \pi - \operatorname{arcsec}(-z)$ $= \arccos\left(\frac{1}{z}\right)$ $= \frac{\pi}{2} - \operatorname{arccsc}(z)$ $= i\operatorname{csgn}\left(i\left(\frac{1}{z}-1\right)\right)\operatorname{arcsech}(z)$ |

2.4.3 Inverse hyperbolic functions

| | |
|-----------------------------|---|
| $\operatorname{arcsinh}(z)$ | $= -\operatorname{arcsinh}(-z)$ $= \frac{\pi}{2}i - \operatorname{csgn}(i - z)\operatorname{arccosh}(-iz)$ $= -i\operatorname{arcsin}(iz)$ |
| $\operatorname{arccosh}(z)$ | $= i\operatorname{csgn}(i(1 - z))\operatorname{arccos}(z)$ $= \operatorname{csgn}(i(1 - z))(\frac{\pi}{2}i - \operatorname{arcsinh}(iz))$ |
| $\operatorname{artanh}(z)$ | $= -\operatorname{artanh}(-z)$ $= \operatorname{arccoth}(z) - \frac{\pi}{2}i\operatorname{csgn}(i(z - 1))$ $= -i\operatorname{arctan}(iz)$ $= -\ln\left(\frac{1 - z}{\sqrt{1 - z^2}}\right)$ |
| $\operatorname{arccoth}(z)$ | $= \operatorname{artanh}(z) + \frac{\pi}{2}i\operatorname{csgn}(i(z - 1))$ $= i\operatorname{arccot}(iz) + \frac{\pi}{2}i(\operatorname{csgn}(i(z - 1)) - 1)$ $= i\operatorname{arctan}(-iz) + \frac{\pi}{2}i\operatorname{csgn}(i(z - 1))$ |
| $\operatorname{arccsch}(z)$ | $= -\operatorname{arccsch}(-z)$ $= \operatorname{arcsinn}(\frac{1}{z})$ $= \operatorname{csgn}(i + \frac{1}{z})\operatorname{arcsech}(-iz) - \frac{\pi}{2}i$ $= i\operatorname{arccsc}(iz)$ |
| $\operatorname{arcsech}(z)$ | $= \operatorname{arccosh}(\frac{1}{z})$ $= i\operatorname{csgn}(i(1 - \frac{1}{z}))\operatorname{arcsec}(z)$ $= \operatorname{csgn}(i(1 - \frac{1}{z}))(\frac{\pi}{2}i + \operatorname{arccsch}(iz))$ |

Bibliography

- [Cox07] David Cox, John Little, and Donald O’Shea. *Ideals, varieties and algorithms. An introduction to computational algebraic geometry and commutative algebra*. Springer, 2007, 978-0-387-35650-1.

Abstract: Around 1980 two new directions in science and technique came together. One was Buchbergers algorithms in order to handle Groebner bases in an effective way for solving polynomial equations. The second one was the development of the personal computers. This was the starting point of a computational perspective in commutative algebra and algebraic geometry. In 1991 the three authors invented the first edition of their book as an introduction for undergraduates to some interesting ideas in commutative algebra and algebraic geometry with a strong perspective to practical and computational aspects. A second revised edition appeared in 1996. That means from the very beginning the book provides a bridge for the new, computational aspects in the field of commutative algebra and algebraic geometry. To be more precise, the book gives an introduction to Buchbergers algorithm with applications to syzygies, Hilbert polynomials, primary decompositions. There is an introduction to classical algebraic geometry with applications to the ideal membership problem, solving polynomial equations, and elimination theory. Some more spectacular applications are about robotics, automatic geometric theorem proving, and invariants of finite groups. It seems to the reviewer to carry coals to Newcastle for estimating the importance and usefulness of the book. It should be of some interest to ask how many undergraduates have been introduced to algorithmic aspects of commutative algebra and algebraic geometry following the line of the book. The reviewer will be sure that this will continue in the future too. What are the changes to the previous editions? There is a significant shorter proof of the Extension Theorem, see 3.6 in Chapter 3, suggested by A.H.M. Levelt. A major update has been done in Appendix C “Computer Algebra Systems”. This concerns in the main the section about MAPLE. Some minor updated information concern the use of AXIOM, CoCoA, Macaulay2, Magma, Mathematica, and SINGULAR. This reflects about the recent developments in Computer Algebra Systems. It encourages an interested reader to more practical exercises. The authors have made changes on over 200 pages to enhance clarity and correctness. Many individuals have reported typographical errors and gave the authors feedback on the earlier editions. The book is well-written. The reviewer guesses

that it will become more and more difficult to earn 1 dollar (sponsored by the authors) for every new typographical error as it was the case also with the first and second edition. The reviewer is sure that it will be an excellent guide to introduce further undergraduates in the algorithmic aspect of commutative algebra and algebraic geometry.

Link: <http://www.dm.unipi.it/~caboara/Misc/Cox,%20Little,%2000'Shea%20-%20Ideals,%20varieties%20and%20algorithms.pdf>

Algebra:

(p??) package GB GroebnerPackage
 (p??) package PSEUDLIN PseudoLinearNormalForm
 (p??) package PGROEB PolyGroebner
 (p??) domain DMP DistributedMultivariatePolynomial
 (p??) domain GDMP GeneralDistributedMultivariatePolynomial
 (p??) domain HDMP HomogeneousDistributedMultivariatePolynomial

- [Hach95] G. Haché and D. Le Brigand. Effective construction of algebraic geometry codes. *IEEE Transaction on Information Theory*, 41(6):1615–1628, November 1995.

Abstract: We intend to show that algebraic geometry codes (AG-codes, introduced by Goppa in 1977 [5]) can be constructed easily using blowing-up theory. This work is based on a paper by Le Brigand and Risler. Given a plane curve, we desingularize the curve by means of blowing-up, and then using the desingularisation trees and the monoidal transformations associated to the blowing-up morphisms, we compute the adjoint divisor of the curve. Finally we show how to use the algorithm of Brill-Noether to compute a basis of the vector space associated to a divisor of the curve. Two examples of constructions of AG-codes are given at the end.

Link: <https://hal.inria.fr/inria-00074404/file/RR-2267.pdf>

Algebra:

(p??) package GPAFF GeneralPackageForAlgebraicFunctionField
 (p??) package PAFFFF PackageForAlgebraicFunctionFieldOverFiniteField
 (p??) package PAFF PackageForAlgebraicFunctionField

- [Kaha86] W. Kahan. Branch cuts for complex elementary functions. In M.J.D Powell and A. Iserles, editors, *The State of the Art in Numerical Analysis*. Oxford University Press, April 1986.
- [Kais09] Stephen H. Kaisler and Gregory Madey. Complex Adaptive Systems: Emergence and Self-Organization, 2009.

Comment: source for Sweeney.eps

Link: <http://www3.nd.edu/~gmadey/Activities/CAS-Briefing.pdf>

- [Normxx] Arthur C. Norman. Notes 13: How to Compute a Groebner Basis.

Link: http://people.math.umass.edu/~norman/462_11/notes/m462notes13.pdf

Algebra:

(p??) package AFALGGRO AffineAlgebraicSetComputeWithGroebnerBasis
 (p??) package GBEUCLID EuclideanGroebnerBasisPackage
 (p??) package GBF GroebnerFactorizationPackage
 (p??) package GBINTERN GroebnerInternalPackage

(p??) package GB GroebnerPackage
 (p??) package GROESOL GroebnerSolve
 (p??) package INTERGB InterfaceGroebnerPackage
 (p??) package LGROBP LinGroebnerPackage
 (p??) package PGROEB PolyGroebner

[Vers16] Jacques Verstraete. Combinatorial Calculus of Formal Power Series.

Comment: 264A Lecture B

Link: <http://www.math.ucsd.edu/~jverstra/264A-LECTUREB.pdf>

[Vogl07] Doctor Vogler. Genus of a Plane Curve, 2007.

Link: <http://mathforum.org/library/drmath/view/71229.html>

Algebra:

(p??) package GPAFF GeneralPackageForAlgebraicFunctionField
 (p??) package PAFFFF PackageForAlgebraicFunctionFieldOverFiniteField
 (p??) package PAFF PackageForAlgebraicFunctionField

[Walk78] Robert J. Walker. *Algebraic Curves*. Princeton University Press, 1978, 978-0-387-90361-3. **Algebra:**

(p??) package GPAFF GeneralPackageForAlgebraicFunctionField
 (p??) package PAFFFF PackageForAlgebraicFunctionFieldOverFiniteField
 (p??) package PAFF PackageForAlgebraicFunctionField

