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10/31/1988

Dear David:

I am writing to confirm the receipt of the PAL video tape of my lecture. We checked it last week and it looks fine. Thank you very much! We had a very successful conference again the first week in October with a user's meeting of PASCAL-SC, FORTRAN-SC, ACRITH and ARITH-MOS on the last day.

IBM has extended their system family ES/9370 by three additional models 30, 50 and 80. All support the ACRITH OP-Codes by hardware. These instructions are now provided by a new chip. Compared with former microcode solutions this allows an easier transfer to other models.

SIEMENS has just announced 8 new models ranging between 2 and 40 MIPS. They also provide the ACRITH OP-Codes by hardware. The same does Hitachi's successor model of their S5 series. I do not know the corresponding NAS number.

All these companies provide an optimal dot product beyond extended precision. The hardware support even speeds up the system compared with a software accumulation in extended precision.

I enclose copies of some brochures for your convenience.

With best regards

Yours

Ulrich Kulisch

Informatik

Neuerscheinung

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Kulisch (Ed.)

PASCAL-SC for the ATARI ST

Information Manual and Floppy Disks

A PASCAL Extension for Scientific Computation

Dr. Ulrich Allendörfer, Dr. Harald Böhm, Dr. Gerd Bohlender,
Dr. Kurt Grüner, Prof. Dr. Edgar Kaucher, Dr. Reinhard
Kirchner, Dr. Rudi Klaitte, Prof. Dr. Ulrich Kulisch,
Dr. Michael Neaga, Prof. Dr. Louis B. Rall, Dr. Siegfried
M. Rump, Ralf Sailer, Lioba Schindele, Prof. Dr. Christian
Ullrich, Prof. Dr. Hans Wilim-Wippelmann, Dr. Jürgen Wolff
von Gudenberg

1987. X, 179 pages and two floppy disks for the ATARI ST.
ISBN 3-519-02108-0 book/disk pack DM 198,-

The new extended PASCAL system called PASCAL-SC (PASCAL for Scientific Computation) is the result of a long-term effort by a team of scientists to produce a powerful tool for solving scientific problems. Due to its properties, PASCAL-SC is also an excellent educational system. The highlights of the system are:

- PASCAL-SC contains ordinary PASCAL
- powerful language extensions like functions with arbitrary result type and user defined operators
- the screen-oriented editor checks the syntax interactively
- decimal floating-point arithmetic and packages providing optimal arithmetic for many higher data types such as complex numbers and intervals as well as corresponding vectors and matrices
- PASCAL-SC demonstration package
- application packages solving linear systems, computing eigenvalues and eigenvectors and evaluating zeros of polynomials and rational expressions
- access to all GEMDOS, BIOS and XBIOS functions as well as AES and VDI routines
- linking of assembler or C routines

This manual describes the complete PASCAL-SC system and its implementation and use on the ATARI ST (operating system GEM/TOS). Two included floppy disks put the whole system at the user's disposal.

U. Kulisch and H.J. Stetter (eds.)

Scientific Computation with Automatic Result Verification

(Computing, Supplementum 6)

1988. 22 figures. Approx. 240 pages.

Soft cover approx. DM 120,-, approx. öS 840,-

Reduced price for subscribers to "Computing":

Soft cover approx. DM 108,-, approx. öS 756,-

ISBN 3-211-82063-9

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rithms with functions as data - Appendix: J.H. Bleher, S.M. Rump, U. Kulisch, M. Metzger, Ch. Ullrich, W. Walter: FORTRAN-SC.

A study of a FORTRAN extension for engineering/scientific computation with access to ACRITH

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