KLUWER ACADEMIC PUBLISHERS

Author's Guide to Typesetting Kluwer Books with LaTeX

Proceedings

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TEXnology Inc.

CONTENTS

Using the Kluwer
Proceedings Style File

Welcome to the use of the Kluwer style file for preparing Proceedings!

You will find that most of the commands found in the LaTeX book will work exactly the same when you use this style file. The new commands specifically for this book style will be explained here, with examples of code and the typeset results. To help make formatting your book with the Kluwer style an easy process, you will also be supplied with sample text, procsamp.tex, and a template file, proctmpl.tex. There is also a sample of one chapter, procchap.tex.

CURRENT VERSION

Please make sure that you have the current version of the macro files and the documentation. If you are in doubt, please download a new copy of the files from
`http://www.wkap.nl/authors/bookstylefiles/latexstyles`.

You may also find the guidelines.pdf file useful. It is found at
`http://www.wkap.nl/authors/bookstylefiles`.

Beware using a set of style files or documentation that you have downloaded from any site other than the official Kluwer site listed here, because they may very well not be current.

GETTING HELP

If you find that you are having a problem **after you have read this documentation carefully**, help may be had by sending email to `dthelp@wkap.com`. If possible, please send a small file demonstrating the problem.

Authors preparing their book with the Kluwer LaTeX style are asked to produce copy identical to the final layout. However, if an author has trouble with the figure/table placement, please inform Kluwer of these problems at time of submission. Authors should indicate where the figures/tables should be set in the paper and Kluwer will prepare the final layout. Make sure to included separate original figures/tables with your article as well as PostScript files of the figures.

LaTeX2.09 AND LaTeX2e

Most people who use LaTeX have moved to the newer version, called for some time LaTeX2e, now simply called LaTeX. If you are one of the few people still using LaTeX2.09, you can use the kapproc macro set. Just rename kapekbk.cls to kapproc.sty and type

`\documentstyle{kapproc}`

AUTHOR WRITTEN MACROS

One of the great pleasures of LaTeX is the ability to add your own macros to simplify your work or to produce effects that are not otherwise readily available.

You are welcome to write you own macros, but we suggest that you keep the macros in your main file so that they don't become separated from your text.

ADDED MACRO PACKAGES

Authors are discouraged from using additional macro packages when using the kapproc macros. Kluwer cannot offer technical support for any package conflicts that may arise from the combination of several packages.

INSERTING .EPS FILES WHEN USING LaTeX

An exception to the suggestion that you don't use additional macro packages is the style used to add .eps files. The standard macro package is graphicx, used as \usepackage{graphicx}. There will be examples of using the \includegraphics[]{} commands on page 27. The following section, on page 29, shows how to use the graphicx command \rotatebox{} to rotate figures and tables to set them in landscape.

The Files in the Kapproc Macro Set

```
kapproc.cls/sty    The main macro file

procdocs.tex, .ps, .pdf Documentation in .tex, .ps, .pdf form

proctmpl.tex       Template File

procps.sty         PostScript font calls
m-times.sty        MathTimes font calls

procchap.tex       Sample File of one Article for Authors
procchap.ps        Sample chapter file in .ps form
procchap.pdf       Sample chapter file in .pdf form
chapbib.bbl        Sample chapter bibliography file

procsamp.tex       Sample File of Complete Book
procsamp.bbl       Sample bibliography file
procsamp.srt       Sample sorted index file
procsamp.ps, pdf Sample file in .ps, .pdf form

Files necessary if you are using Scientific Word/Workplace
----------------------------------------------------------
kapproc.swp        Text file describing how to use kapproc.cls with SWP

procbook.shl       Shell files used by SWP
procdocs.shl
procsamp.shl

procsamp.sav       SWP version of procsamp.tex, sample file
procdocs.sav       SWP version of procdocs.tex, documentation

Inserting .eps files
--------------------
graphics.zip  Graphics files, including graphicx.sty, used for
                 inserting .eps files.

figsamp.eps    Sample .eps file

Kluwer BibTeX style file
------------------------
kapalike.bst
```

The Sample Files

`procsamp.tex` is a sample file which shows examples of the commands that may be used in your book. You may run LaTeX on this file to compare the results with the mark-up code within the file. This alone should indicate how to format your book in most cases. There is also a sample chapter, procchap.tex.

The Template File

A template file, `proctmpl.tex` is provided to make it easier to enter the the commands in the correct order. It should be self-explanatory, and contains many examples of commands you might like to use.

To use the template file you should:

- ■ Copy `proctmpl.tex` to `<yourfile>.tex`.
- ■ Enter your text.

Starting your book

Your book will start with

```
\documentclass{kapproc}
```

or,

```
\documentstyle{kapproc}
```

Computer Modern vs. PostScript

The default font set when using LaTeX is Computer Modern. Authors can choose to use either Computer Modern or PostScript fonts, but the results will be much more handsome with PostScript fonts, and authors are **strongly** encouraged to use PostScript for the final version of their book.

To use Computer Modern fonts:

```
\documentclass{kapproc} %% (LaTeX)
\documentstyle{kapproc} %% (LaTeX2.09)
```

To use the PostScript and/or MathTimes font files:

When using the current version of LaTeX:

```
\documentclass{kapproc}
\usepackage{m-times} %% for MathTimes math fonts, if you have these fonts
\usepackage{procps} %% for PostScript text fonts
```

When using LaTeX2.09:

```
\documentstyle[procps]{kapproc} % For PostScript text, Computer Modern Math:
```

RENAMING POSTSCRIPT FONT DEFINITIONS

Since the PostScript fonts have different names on different systems, you may need to redefine the font names at the top of the `procps.sty` file. (The default names are the names invented by Karl Berry, used by the dvips driver program.) If you do not already know the names of the Times and Helvetica fonts on your system, you will have to find the directory where your .tfm fonts are stored to try figure out their names, or consult your driver documentation to find the correct names.

The changes should be confined to the top part of the file. Those changes will be used in the file below to customize your .sty file. Change this part of the file:

```
%%  Change these definitions, if necessary ====>

%% Times-Roman
% Berry names
\def\timesroman{ptmr}
\def\timesbold{ptmb}
\def\timesitalic{ptmri}
\def\timesbolditalic{ptmbi}

%% Dvipsone names
% \def\timesroman{tir}
% \def\timesbold{tib}
...
```

If you use MathTimes fonts, you may also have to change these names in the beginning of the m-times.sty file:

```
%% Times-Roman
\def\TimesRoman{ptmr}

%% Helvetica
%\def\Helvetica{phvr}

%% Courier
%\def\Courier{pcrr}

%% Please do not make any changes below this point!
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

Customizing Your Book Format

Between the \documentclass{} and \begin{document} commands you have a number of possibilities that may be used to customize the format of your book. (You will see these commands in both the procsamp.tex and proctmpl.tex files.) Consult your editor to see if any of these changes are acceptable, since you will want to match the other chapters in the book.

Running heads:
\chapsectrunningheads will make chapter title on left hand page and section title on right hand page

Section heads:
\chaptersection will use chapter.section form for section heads.

\upperandlowercase Uncomment to make section heads appear in both upper and lower case.

\useuppercase Uncomment to make section and subsection heads appear in uppercase.

\setcounter{secnumdepth}{1} How many levels of section head would you like numbered?
0= no section numbers, 1= section, 2= subsection, 3= subsubsection

Table of Contents:
\setcounter{tocdepth}{1} how many levels of section head would you like to appear in the Table of Contents?
0= chapter titles, 1= section titles, 2= subsection titles, 3= subsubsection titles.

Equation numbering:
\nochapequationnumber which will result in equation numbers that are (1)

\sectionequationnumber which will result in equation numbers that are (1.1) and renumber for each section
Default for kapmono and kapedbk is (chapternumber.equationnumber)
Default for kapproc is (equation number)

Theorem numbering:
\nochaptheoremnumber will make the theorem type environments number only with the theorem number. Default is chapter.theorem for kapmono and kapedbk. Default is only theorem number for kapproc.

Footnotes/Endnotes:
Default is endnotes that appear at the end of the chapter, above the references, or whereever \notes is written. To change footnotes to appear at bottom of page:

\let\footnote\savefootnote Uncomment to make footnote appear at bottom of page.

\let\footnotetext\savefootnotetext Uncomment if you want footnotetext to appear at the bottom of the page.

\let\footnoterule\savefootnoterule Uncomment if you want a ruled line above the footnote.

(More on next page)

Bibliography Style Settings:
  Choose either kluwerbib or normallatexbib

\kluwerbib will produce this kind of bibliography entry:

```
    Anderson, Terry L.,...
      continuing bib entry here
```

  \cite{xxx} will print without brackets around the citation.

  (\bibliographystylekapalike should be used when you use \kluwerbib.)

\normallatexbib will produce bibliography entries as shown in the LaTeX book

```
    [1] Anderson, Terry L.,
        continuing bib entry
```

  \cite{xxx} will print with square brackets around the citation, i.e., [1].

  Any \bibliographystyle{} may be used with \normallatexbib, but you should check
  with your editor to find the style preferred for your book.

Change Brackets around Citation:
- Default with \kluwerbib is no brackets around citation.
- Default with \normallatexbib is square brackets around citation.

  If you want parens around citation, i.e., (citation), type in these lines, or uncomment them if you
  are using the template file.

```
  \let\lcitebracket(
  \let\rcitebracket)
```

Draft Line:
\draft You may use the command \draft immediately after the \documentclass command.
  This will cause a line to appear at the bottom of each page containing the words 'Draft' with the
  page number, current date and time that the file was LaTeXed.

ORDERING THE VARIOUS PARTS OF THE BOOK

The various parts of the book should be entered in this order.

```
Half title page
Blank
Full Title page
Blank
Dedication
Blank
Contents
List of Figures
List of Tables
List of Contributors
Foreword
Preface
Acknowledgements

\part{} or \partwithtext{}{}
Introduction
\chapter{}
...

Glossary
Appendices
Bibliography
Index
```

Front Matter

DEDICATION

If you want to make a dedication, it should be made before the table of contents.

```
\dedication{This book is dedicated to the development
of greater understanding between our peoples, and to
the opportunity to diminish trade conflicts in the future.}
```

FOREWORD

The foreword comes after the table of contents, and is formatted with
\begin{foreword}...\end{foreword}.
At the end of the foreword, there is an optional command that you can use to format the foreword
author name: \forewordauthor{}.

```
\begin{foreword}
In the first, 1987, edition of this book, Dr.~Higashi and Dr.~Lauter
have discussed and analyzed the initial stages of the
```

```
internationalization process...
\forewordauthor{Michio Watanabe, Chairman\\
LDP Policy Affairs Research Council 1988--1989\\
Tokyo, May 1989\\
\\
Minister of International Trade and\\
Industry, December 1985--July 1986}
\end{foreword}
```

....

Foreword

In the first, 1987, edition of this book, Dr. Higashi and Dr. Lauter have discussed and analyzed the initial stages of the internationalization process...

> Michio Watanabe, Chairman
> LDP Policy Affairs Research Council 1988–1989
> Tokyo, May 1989
>
> Minister of International Trade and
> Industry, December 1985–July 1986

PREFACE

Preface is next. If you have sections in the preface, you should use the star form of section command: `\section*{Preface Section}`. You can also use the `\prefaceauthor{}` command to format the preface author name.

```
\begin{preface}
This is an example preface. This is an example preface.
This is an example preface. This is an example preface.
\section*{This is a preface section}
This is an example of a preface.
This is an example preface. This is an example preface.
This is an example preface. This is an example preface.
\prefaceauthor{David Reisman}
\end{preface}
```

....

Preface

This is an example preface. This is an example preface. This is an example preface. This is an example preface.

This is a preface section

This is an example of a preface. This is an example preface. This is an example preface. This is an example preface. This is an example preface.

<div align="right">DAVID REISMAN</div>

ACKNOWLEDGMENTS

To make an acknowledgment, singular, use \begin{acknowledgment}, for acknowledgements, use:

```
\begin{acknowledgments}
Much of the information and insight presented in this book
was obtained through personal interviews particularly with
Japanese and, to a lesser extent, American government officials
and business executives in Tokyo and Washington, D.C. While
they are too numerous to mention individually, their willingness
to take time out of their busy schedules is very much appreciated.
\end{acknowledgments}
```

....

Acknowledgments

Much of the information and insight presented in this book was obtained through personal interviews particularly with Japanese and, to a lesser extent, American government officials and business executives in Tokyo and Washington, D.C. While they are too numerous to mention individually, their willingness to take time out of their busy schedules is very much appreciated.

Part and Part with Text

As well as the normal LaTeX \part{<part title>} command, we now also have a new command: \partwithtitle{<part title>}{<text>}

If the square bracket argument is used, it will send the text to the TOC.

```
\partwithtext[Introduction to Book]{Introduction}
{Test resource partitioning (TRP)
for system-on-a-chip (SOC) refers to the process of partioning monolithic
test resources, such as the test data set or the top-level TAM into
sub-components that can be optimized to achieve significant gains in test
resource utilization.}
```

....

I

INTRODUCTION

Test resource partitioning (TRP) for system-on-a-chip (SOC) refers to the process of partioning monolithic test resources, such as the test data set or the top-level TAM into sub-components that can be optimized to achieve significant gains in test resource utilization.

Controlling what is sent to the TOC

There are a number of commands the use optional square bracket to enable you to enter commands to be printed on the page in one form, and to be sent to the Table of Contents and Running head in another form. These include
`\booktitle[]{}, \part[]{}, \partwithtitle[]{}{},`
`\chapter[]{}, \section[]{}, \subsection[]{}, \appendix[]{}.`

You can use `\\` to break lines in any of these commands within the curly brackets, and without `\\` within square brackets. This means that you can break lines easily in the body of the title without causing confusion in the Table of Contents.

You do not need to use the square bracket at any time except when you want to provide two different forms of the title.

```
\booktitle[<optional shorter version without \\ to appear in running heads>]
{<title>}% may use \\ to start new lines

\part[<optional short version for TOC>]{<part title>} % or ==>
\partwithtext[<optional short version for TOC>]{<part title>}{<part text>}

\chapter[<optional short version for running head and TOC>]
          {<chapter title as appears on page>}%

\section[<optional short version for TOC>]{<section title>}
```

Controlling Running Heads

You may want to print one version of a chapter or section head and send another version to the TOC. You may want to send a third version to print in the running head. In addition, it is not unusual to have a section or chapter title that is too long to fit into the running head. In any case we can use one of the following commands which will only control the running heads, not effect the chapter or section title, or the TOC entry.

To determine the book title running head, type

```
\booktitlerunninghead{<Book Title for Running Head>}
```

To send a variation on the article title you can use
`\chaptitlerunninghead{<Article Title for Running Head>}` after the article title:

```
\articletitle{Here is an Article Title}
\chaptitlerunninghead{<Article Title for Running Head>}
```

If you are using the `\chapsectrunningheads` option you can use the usual LaTeX commands:
`\markboth{}{}` or `\markright{}`.
(`\chapsectrunningheads` will make chapter title on left hand page and section title on right hand page)

```
\articletitle{Article Title}
\markboth{<Short version of Article Title for Left Running Head>}
{<Short version of Article Title for Right Running Head>}

\section{Section Head}
\markright{<Short version of Section Title for Running Head>}
```

INTRODUCTION

If you use an introduction, it should come after the optional part page and should be numbered with arabic rather than roman numbers.

```
\introduction{David Reisman}
For many, the distinction is clear. Economics is about the market,
about individuals maximizing utility and firms maximizing profit.
Politics is about the state, about constitutional rules and piecemeal
interventions. The two realms are separate and distinct...
```

....

Introduction

David Reisman

For many, the distinction is clear. Economics is about the market, about individuals maximizing utility and firms maximizing profit. Politics is about the state, about constitutional rules and piecemeal interventions. The two realms are separate and distinct...

Starting Your Article

We will look at some commands you can use, and then show a sample article title page;

```
\articletitle[]{}
\author{}
\prologue{}{}% optional prologue
```

USING OPTIONAL SQUARE BRACKETS

`\title[]{}`, `\part[]{}`, `\section[]{}` and `\subsection[]{}` all allow you to enter the title in square brackets in the way you'd like it to appear in the Table of Contents, and in curly brackets in the way that you want the title to appear on the page in the body of the article. You can use `\\` to break lines in any of these commands within the curley brackets, and without `\\` within square brackets. This means that you can break lines easily in the body of the article without causing confusion in the Table of Contents.

If you are not using `\\` you do not need to supply a title within square brackets.

AUTHOR NAME

For author, write `\author{<Author Name>}`.

You may also supply names of multiple authors:

```
\author{Author Name}
```

```
\author{Second Author}
```

Sample Title Block

```
\articletitle[Communism, Sparta, and Plato]<<== goes to TOC and Running Head
{COMMUNISM, SPARTA,\\ and PLATO\thanks{The thanks command will work
in the articletitle}%
}<<== prints on current page

% <<== Important:
% If you want to enter a shortened version of the chapter title
% in the running head, but not change the chapter title in
% the table of contents, use:
% \chaptitlerunninghead{short title}


\author{Samuel Bostaph}
\author{Gregor Kariotis}

%% Optional prologue command:
\prologue{The organization of our forces is a thing calling in its
nature for much advice and the framing of many rules, but the principal
[first] is this---that no man, and no woman, be ever suffered
to live without an officer set over them, and no soul of man
to learn the trick of doing one single thing of its own sole
motion,
in play or in earnest, but in peace as in war...\footnote{This
prologue represents thought developed and written more than two
thousand years ago. That is quite a few years!}}
{Plato, {\it Laws}, 942a--c}
```

. . . .

COMMUNISM, SPARTA, AND PLATO*

Samuel Bostaph

Gregor Kariotis

The organization of our forces is a thing calling in its nature for much advice and the framing of many rules, but the principal [first] is this—that no man, and no woman, be ever suffered to live without an officer set over them, and no soul of man to learn the trick of doing one single thing of its own sole motion, in play or in earnest, but in peace as in war...[1]

—Plato, *Laws*, 942a–c

Notes

1. This prologue represents thought developed and written more than two thousand years ago. That is quite a few years!

---

*The thanks command will work in the articletitle

SAMPLE TITLE WITH MULTIPLE AUTHORS AND AFFILIATIONS

There are several ways to handle the formatting of a title page with multiple authors and affiliations.

The first is to list each author separately, followed by his/her affiliation.

You can also list the authors together, and give each author an affiliation number or numbers, and follow with separate numbered affiliations.

You will see examples of each of these methods on the following pages:

```
\articletitle[Audio Quality Determination]
{Audio Quality Determination\\
Based on Perceptual \\
Measurement Techniques
}

\author{John G. Beerends}
\affil{Royal PTT Netherlands N.V.\\
KRN Research, P. Box 421, AK Leidenham\\
The Netherlands}
\email{beerends@ptt.com.nl}

\author{James Joyce}
\affil{Trinity University\\
Dublin, Ireland}
\email{jjoyce@dublin.ir}

\author{Arthur Miller}
\affil{Syracuse University,\\
Syracuse, NY}
\email{arthurm@math.syracuse.edu}

%% optional, to supply a shorter version of the title for the running head:
%%\rhead{}

\begin{abstract}
Here is quite a long abstract.
Here is quite a long abstract.
Here is quite a long abstract....
\end{abstract}

\begin{keywords}
Sample keywords, sample keywords.
\end{keywords}
```

. . . .

AUDIO QUALITY DETERMINATION BASED ON PERCEPTUAL MEASUREMENT TECHNIQUES

John G. Beerends
Royal PTT Netherlands N.V.
KRN Research, P. Box 421, AK Leidenham
The Netherlands
beerends@ptt.com.nl

James Joyce
Trinity University
Dublin, Ireland
jjoyce@dublin.ir

Arthur Miller
Syracuse University,
Syracuse, NY
arthurm@math.syracuse.edu

Abstract   Here is quite a long abstract. Here is quite a long abstract. Here is quite a long abstract....

Keywords: Sample keywords, sample keywords.

USING AFFILIATION NUMBERS WITH AUTHORS

Here is a method of using affiliation numbers to let the reader know which authors have which affiliations. We have two new commands: \altaffilmark{} to be used in the \author{} environment; and \altaffiltext{}{} where the first argument is used for the affiliation number and the second for the affiliation.

This allows you to list several affiliations for one author, and is less verbose than listing each author and affiliation separately.

```
\articletitle[Audio Quality Determination]
{Audio Quality Determination\\
Based on Perceptual \\
Measurement Techniques
}

\author{John G. Beerends,\altaffilmark{1} James Joyce,\altaffilmark{2}
and Arthur Miller\altaffilmark{1,3}}

\altaffiltext{1}{Royal PTT Netherlands N.V.\\
KRN Research, P. Box 421, AK Leidenham\\
The Netherlands}
\email{beerends@ptt.com.nl}

\altaffiltext{2}{Trinity University\\
Dublin, Ireland}
\email{jjoyce@dublin.ir}

\altaffiltext{3}{Syracuse University,\\
Syracuse, NY}
\email{arthurm@math.syracuse.edu}

\begin{abstract}
Here is quite a long abstract.
Here is quite a long abstract.
Here is quite a long abstract....
\end{abstract}

\begin{keywords}
Sample keywords, sample keywords.
\end{keywords}
```

. . . .

AUDIO QUALITY DETERMINATION BASED ON PERCEPTUAL MEASUREMENT TECHNIQUES

John G. Beerends,[1] James Joyce,[2] and Arthur Miller[1,3]

[1]*Royal PTT Netherlands N.V.*
KRN Research, P. Box 421, AK Leidenham
The Netherlands
beerends@ptt.com.nl

[2]*Trinity University*
Dublin, Ireland
jjoyce@dublin.ir

[3]*Syracuse University,*
Syracuse, NY
arthurm@math.syracuse.edu

Abstract   Here is quite a long abstract. Here is quite a long abstract. Here is quite a long abstract....

Keywords: Sample keywords, sample keywords.

ANOTHER OPTION FOR AFFILIATION NUMBERS

Here is another method of using affiliation numbers, using many numbers in one affiliation. This method might be preferable where there are more than three authors.

```
...

\author{John G. Beerends,\altaffilmark{1} James Joyce,\altaffilmark{2}
and Arthur Miller\altaffilmark{1,3}}

\affil{\altaffilmark{1}Royal PTT Netherlands N.V., \
\altaffilmark{2}Trinity University, \ \altaffilmark{3}Syracuse
University}

\begin{abstract}
Here is quite a long abstract.
Here is quite a long abstract.
Here is quite a long abstract....
\end{abstract}

\begin{keywords}
Sample keywords, sample keywords.
\end{keywords}
```

....

AUDIO QUALITY DETERMINATION BASED ON PERCEPTUAL MEASUREMENT TECHNIQUES

John G. Beerends,[1] James Joyce,[2] and Arthur Miller[1,3]
[1]*Royal PTT Netherlands N.V.,* [2]*Trinity University,* [3]*Syracuse University*

Abstract   Here is quite a long abstract. Here is quite a long abstract. Here is quite a long abstract....

Keywords: Sample keywords, sample keywords.

Using thanks in title block

You can offer additional information in the title block with the use of the `\thanks{}` command:

```
\articletitle[Audio Quality Determination]
{Audio Quality Determination\\
Based on Perceptual \\
Measurement Techniques\thanks{Thanks works in articletitle}
}

\author{John G. Beerends\thanks{Thanks works in author.}}
\affil{Royal PTT Netherlands N.V.\\
KRN Research, P. Box 421, AK Leidenham\\
The Netherlands\thanks{Thanks works in affil.}}
\email{beerends@ptt.com.nl\thanks{Thanks works in email.}}

\author{James Joyce}
\affil{Trinity University\\
Dublin, Ireland}
\email{jjoyce@dublin.ir}

\author{Arthur Miller}
\affil{Syracuse University,\\
Syracuse, NY}
\email{arthurm@math.syracuse.edu}

\begin{abstract}
Here is quite a long abstract.
Here is quite a long abstract.
Here is quite a long abstract....
\end{abstract}

\begin{keywords}
Sample keywords, sample keywords.
\end{keywords}
```

. . . .

AUDIO QUALITY DETERMINATION BASED ON PERCEPTUAL MEASUREMENT TECHNIQUES[*]

John G. Beerends[†]
Royal PTT Netherlands N.V.
KRN Research, P. Box 421, AK Leidenham
The Netherlands[‡]
beerends@ptt.com.nl[§]

James Joyce
Trinity University
Dublin, Ireland
jjoyce@dublin.ir

Arthur Miller
Syracuse University,
Syracuse, NY
arthurm@math.syracuse.edu

Abstract   Here is quite a long abstract. Here is quite a long abstract. Here is quite a long abstract....

Keywords: Sample keywords, sample keywords.

   text...

---

[*]Thanks works in articletitle
[†]Thanks works in author.
[‡]Thanks works in affil.
[§]Thanks works in email.

Lettered Equations

Math in this style is handled the same as in any LaTeX style, with the exception that we have the added command for lettered equations:

```
Lettered equation,
\begin{equation}
g_i(y|f)=\sum_x P(x|F_n)f_i(y|x)\mathletter{a}
\end{equation}
Second lettered equation
\begin{equation}
g_i(y|f)=\sum_x P(x|F_n)f_i(y|x)\mathletter{b}
\end{equation}
Unlettered equation
\begin{equation}
g_i(y|f)=\sum_x P(x|F_n)f_i(y|x)
\end{equation}
Formally, this amounts to calculating:
\begin{eqnarray}
g_1(y|f)&=\sum_x P(x|F_n)f_1(y|x)\mathletter{a}\\
g_2(y|f)&=\sum_x P(x|F_n)f_2(y|x)\mathletter{b}\\
g_3(y|f)&=\sum_x P(x|F_n)f_3(y|x)\mathletter{c}
\end{eqnarray}
where $g_i(y|F_n)$ is the function specifying...
```

....

Lettered equation,

$$g_i(y|f) = \sum_x P(x|F_n)f_i(y|x) \tag{1a}$$

Second lettered equation

$$g_i(y|f) = \sum_x P(x|F_n)f_i(y|x) \tag{1b}$$

Unlettered equation

$$g_i(y|f) = \sum_x P(x|F_n)f_i(y|x) \tag{2}$$

Formally, this amounts to calculating:

$$
\begin{aligned}
g_1(y|f) &= \sum_x P(x|F_n)f_1(y|x) \\
g_2(y|f) &= \sum_x P(x|F_n)f_2(y|x) \\
g_3(y|f) &= \sum_x P(x|F_n)f_3(y|x)
\end{aligned}
\tag{3a,3b,3c}
$$

where $g_i(y|F_n)$ is the function specifying...

All the Things that can be Done with Captions

Captions made with this style are the same as normal LaTeX captions:

```
\begin{figure}[h]
\vskip.2in
\caption{Short caption.}
\end{figure}
```

Remember that if you use indexing commands within a caption to preceed the command with \protect:

```
\begin{figure}[h]
\vskip2pt
\caption{\protect\inx{Oscillograph} for memory address access
operations, showing 500 ps
address access time and $\alpha\beta\Gamma\Delta\sum_{123}^{345}$
\protect\inx{superimposed signals}%
\protect\inxx{address,superimposed
signals} of address access in 1 kbit
memory plane.}
\end{figure}
```

To make captions that print next to each other, you have the command \sidebyside{}{} to use. Just put a caption into each set of curly brackets and the captions will print next to each other:

```
\begin{figure}[ht]
\sidebyside{Space for figure...
\caption{This caption will go on the left side of
the page. It is the initial caption of two side-by-side captions.}}
{space for figure...
\caption{This caption will go on the right side of
the page. It is the second of two side-by-side captions.}}
\end{figure}
```

....

Space for figure...   space for figure...

Figure 1.   This caption will go on the left side of   *Figure 2.*   This caption will go on the right side of the
the page. It is the initial caption of two side-by-side   page. It is the second of two side-by-side captions.
captions.

In some cases you might want to use a continued caption, with the same figure number used as for last caption. The command \contcaption is the command to use:

```
\begin{figure}[h]
\contcaption{This is a continued caption.}
\end{figure}
```

....

Figure 2 (continued).   This is a continued caption.

If you want to make a narrow caption, here is the code:

```
\begin{figure}[h]
\narrowcaption{This is a narrow caption so that it can
be at the side of the illustration. This is a narrow caption.
This is a narrow caption. This is a narrow caption.}
\end{figure}
```

....

Figure 3 This is a narrow caption so that it can be at the side of the illustration. This is a narrow caption. This is a narrow caption. This is a narrow caption.

Then, to make a narrow continued caption:

```
\begin{figure}[h]
\narrowcontcaption{This is a narrow continued caption. This is a
narrow continued caption. This is a narrow continued caption.}
\end{figure}
```

Figure 3 (continued)
This is a narrow continued caption. This is a narrow continued caption. This is a narrow continued caption.

To make captions with letters, write:

```
\begin{figure}[h]
\letteredcaption{a}{Lettered caption.}
\end{figure}

\begin{figure}[h]
\letteredcaption{b}{Lettered caption.}
\end{figure}
```

Figure 4a. Lettered caption.

Figure 4b. Lettered caption.

Captions may be both lettered and print side by side:

```
\begin{figure}
\sidebyside
{\letteredcaption{b}{One caption.}}
{\letteredcaption{c}{Two captions.}}
\end{figure}
```

Figure 4b. One caption.   *Figure 4c.* Two captions.

Illustrations, using graphicx.sty to insert .eps files

If you want to include .eps illustrations, or turn figures or tables on their side, you should use graphicx.sty, which has become the standard way to do this, and which is quite reliable.

Graphicx.sty is part of the general LaTeX distribution so you should already have it on your system. If you don't already have graphicx.sty, you can download the graphics.zip file from the CTAN web site. Go to `http://www.ctan.org` and search for graphics.zip, then click on the filename, which will download the file to your machine.

(`www.ctan.org` is the repository for all the publicly available TeX and LaTeX files. It is a resource you might like to explore for other files as well. Another web address you might find useful is `http://www.tug.org`, the site for the TeX Users Group.)

You should tune the graphicx package by selecting the driver program that is on your system and using that name as the optional argument.

```
\usepackage[<your driver program>]{graphicx}

%for instance:

\usepackage[dvipsone]{graphicx}
```

Please choose the name that matches your program. If you don't see the name listed here, try dvips.

```
[dvips], [xdvi], [dvipdf], [dvipsone], [dviwindo], [emtex], [dviwin],
[pctexps], [pctexwin], [pctexhp], [pctex32], [truetex], [tcidvi],
[oztex], [textures]
```

LATEX2.09 USERS:

Since graphicx.sty is made to work with the current version of LaTeX, you may have problems getting it to work with LaTeX 2.09. You can try

`\documentstyle[graphicx]{kapmono}` but no guarantees that it will work right for you.

You might use another style file for inserting .eps files, for instance, epsf.sty:

`\documentstyle[epsf]{kapmono}`

Using \includegraphics[]{}

The basic command you use to include your .eps files is \includegraphics. The command takes the name of the .eps file as its argument, and allows optional square brackets to set the width or height of the illustration.

Here are some ways you can use the \includegraphics command:

```
\includegraphics[width=\textwidth]{figsamp.eps}
\includegraphics[height=1in]{figsamp.eps}
```

If you make the illustration be less than the width of the page (\textwidth) you will probably want to center the illustration:

```
\begin{figure}
\centerline{\includegraphics[width=2in]{figsamp}}
\caption{Here is the caption}
\end{figure}
```
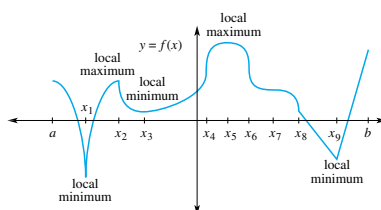
. . . .

Figure 5.   Here is the caption

For more information on options when using the graphicx.sty command, \includegraphics, please see grfguide.dvi, which is included in the graphics.zip package.

Using graphicx.sty for landscape tables and figures

If you want your figure or table to print in landscape, you will also want them to print on their own page. This means you should use the \begin{figure}[p] or \begin{table}[p].

The \rotatebox takes one argument which determines the number of degrees that the box should be rotated; and the second argument that includes a box.

To make the figure fall in the right position we use a box whose height is the width of the page, or \textwidth, which we set with \vbox to \textwidth.

The width should be the height of the page, which we set with the command \hsize=\textheight within the box.

The \vfill command will push the contents of the box to the bottom, which is positioned in this case on the right side of the page.

Here is the code to make a figure print in landscape:

```
\begin{figure}[p]
\rotatebox{90}{\vbox to\textwidth{
\vfill
\hsize=\textheight

\includegraphics{}
\caption{}

}}
\end{figure}
```

Here is an actual figure to be printed in landscape:

```
\begin{figure}[p]
\rotatebox{90}{\vbox to\textwidth{
\vfill
\hsize=\textheight

\centerline{\includegraphics[width=\textheight]{figsamp.eps}}

\caption[Self-Organizing Maps and Cluster Analysis]{Self-Organizing Maps and
Cluster Analysis.  Clustering of tumor gene expression data and
identification of tumor-specific molecular markers. Hierarchical clutering
(1) and a 5x5 self organizng map (b) were used to cluster 144 tumors spanning
14 tumor classes according to their gene expression patterns (c) gene
expression values for class-specific OVA markers.}}}
\end{figure}
```

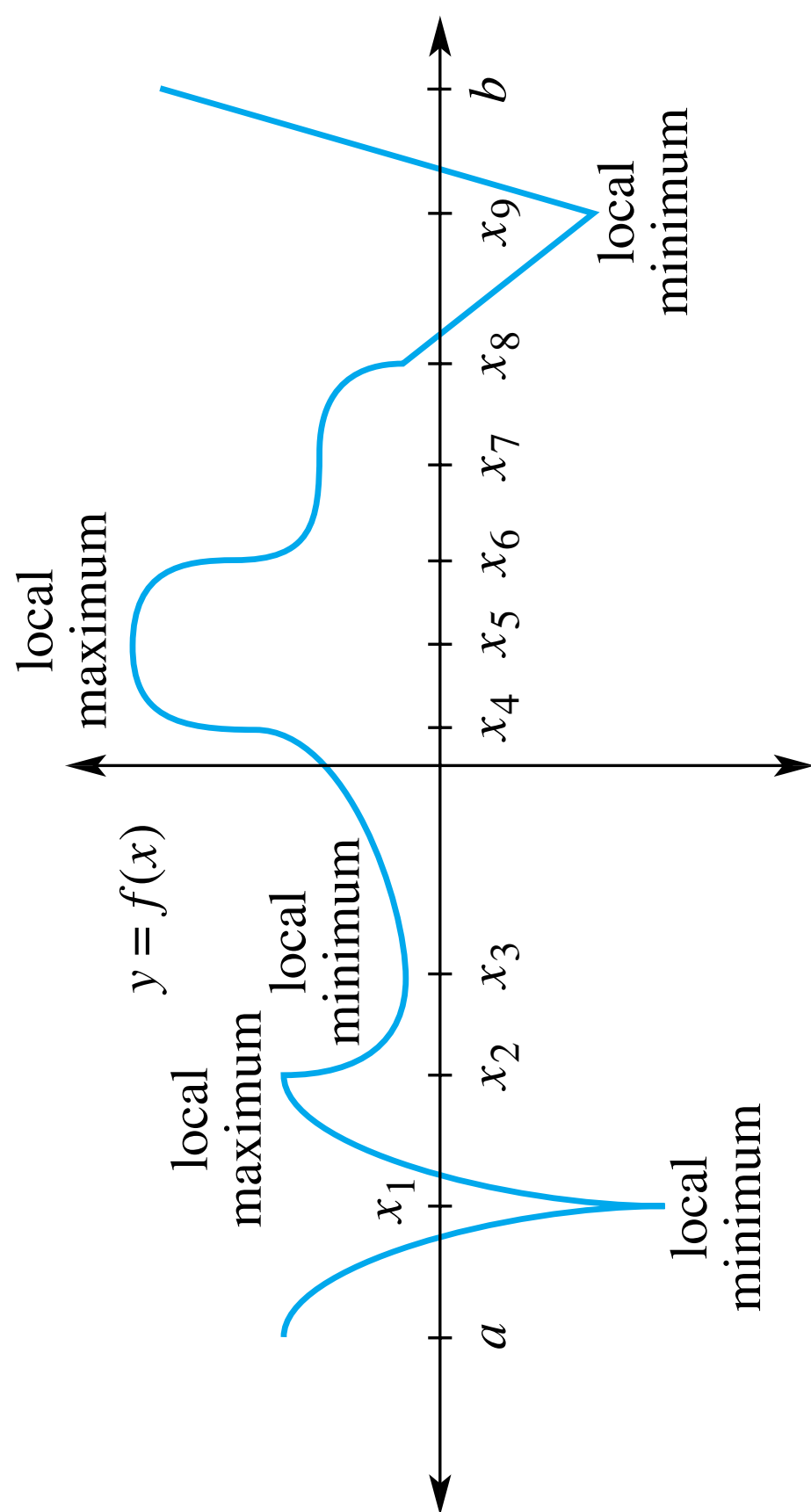You can see how this looks on the next page.

Figure 6. Self-Organizing Maps and Cluster Analysis. Clustering of tumor gene expression data and identification of tumor-specific molecular markers. Hierarchical clutering (1) and a 5x5 self organizng map (b) were used to cluster 144 tumors spanning 14 tumor classes according to their gene expression patterns (c) gene expression values for class-specific OVA markers.

Landscape Table

You make a table print in landscape very much as you do for figures:

```
\begin{table}[p]
\rotatebox{90}{\vbox to\textwidth{
\hsize=\textheight

\caption{}
\begin{tabular}...\end{tabular}

}}
\end{table}
```

Here is an example landscape table:

```
\begin{table}[p]
\rotatebox{90}{\vbox to\textwidth{
\hsize=\textheight
\caption{Here is a sample landscape table caption}
\def\ph{\phantom{age }}
\def\pph{\phantom{th}}
\begin{tabular*}{.9\textheight}{@{\extracolsep\fill}lccrrrcrrr}
&&\multicolumn{4}{c}{\bf Panel A}&\multicolumn{4}{c}{\bf Panel B}\cr
&&\multicolumn{4}{c}{\bf Regression A}&\multicolumn{4}{c}{\bf Regression B}\cr
\cline{3-6}\cline{7-10}\cr
...
\end{tabular*}
}}
\end{table}
```

You'll see this table on the next page.

Table 1. Here is a sample landscape table caption

Year	Actual M2 Growth	Panel A Regression B				Panel B Regression B			
		Predicted M2 Growth	Error			Predicted M2 Growth	Error		
			Growth	Cumulative			Growth	Cumulative	
				Level (billions)	Percentage			Level (billions)	Percentage
1990Q4	4.0	6.4	−2.3	−71	2.2	6.5	−2.4	−80	2.4
1991Q4	3.0	3.6	−0.5	−91	2.7	3.3	−0.3	−92	2.7
1992Q4	1.8	6.4	−4.5	−257	7.5	5.9	−4.0	−239	6.9
1993Q4	1.4	4.8	−3.4	−392	11.2	5.0	−3.6	−381	10.9
1994Q4	0.6	3.0	−2.4	−489	13.9	2.6	−2.0	−464	13.2
1995Q4	3.8	3.5	0.3	−495	13.6	4.2	−0.4	−500	13.7
1996Q4	4.5	3.9	0.5	−495	13.0	4.0	−0.4	−505	13.3
Mean Error (1990–1996)			−1.78				−1.78		
RMSE			2.52				2.40		

Making Tables

There are two aspects of making tables with this macro package that need to be mentioned.

First, you need to enter commands as you see in the section 'Normal Tables' below, in order to have the table have the correct appearance. This includes using the command \sphline instead of \hline, which will add a little vertical space between lines, making your table look more professional and finished.

Second, if you are making tables with vertical lines, which you should only do if the vertical lines are crucial to convey the information in your table, you should use the normal LaTeX command \hline instead of \sphline.

Normal Tables

In order to make your table conform to the Kluwer Book specification you must follow several steps.

- Use \sphline at the top of the table, underneath the column headers, and at the end of the table.
- Please enter \it before each column head, to make the column heads appear in italic.
- You are discouraged from using vertical lines in tables.
- Make your table span the full page width if possible.

The following example shows these steps being followed and the form of the table preamble that will cause the table to spread out to the width of the page:

```
\begin{table}[h]
\caption{This is an example table caption. If there is
enough text it will form a paragraph.}
\begin{tabular*}{\hsize}{@{\extracolsep{\fill}}lcr}
\sphline
\it$\alpha\beta\Gamma\Delta$ One&\it Two&\it Three\cr
\sphline
one&two&three\cr
one&two&three\cr
\sphline
\end{tabular*}
\end{table}
```

Table 2. This is an example table caption. If there is enough text it will form a paragraph.

$\alpha\beta\Gamma\Delta$ One	Two	Three
one	two	three
one	two	three

MAKING TABLE NOTES

Table notes are made by entering the symbol that you want to use in math mode in a superscript. At the end of the table, please enter the command `\begin{tablenotes}` and enter the notes, as seen below.

```
\begin{table}[h]
\caption{Effects of the Two Types of Scaling Proposed by
\protect\inx{Dennard} and Co-Workers.$^{a,b}$}
\begin{tabular*}{\textwidth}{@{\extracolsep{\fill}}lcc}\sphline
Parameter& $\kappa$ Scaling & $\kappa$, $\lambda$ Scaling\\
\sphline
Dimension&$\kappa^{-1}$&$\lambda^{-1}$\\
Voltage&$\kappa^{-1}$&$\kappa^{-1}$\\
Currant&$\kappa^{-1}$&$\lambda/\kappa^{2}$\\
\sphline
\end{tabular*}
\begin{tablenotes}
$^a$Refs.~19 and 20.

$^b\kappa, \lambda>1$.
\end{tablenotes}
\end{table}
```

Table 3. Effects of the Two Types of Scaling Proposed by Dennard and Co-Workers.[a,b]

Parameter	κ Scaling	κ, λ Scaling
Dimension	κ^{-1}	λ^{-1}
Voltage	κ^{-1}	κ^{-1}
Currant	κ^{-1}	λ/κ^2

[a]Refs. 19 and 20.
[b]$\kappa, \lambda > 1$.

VERTICAL LINES IN TABLES

Notice in the previous examples that no vertical lines were used. If at all possible to make your meaning clear without vertical lines, please leave them out.

Since we usually do not want vertical lines in tables and we do want the horizontal lines to extend exactly to the left and right of text, we must go to some extra efforts to get the vertical lines to extend to the top and bottom of the column and to not have extra horizontal space to the right of the vertical line in the last column. Remember to add another column entry to the table preamble and then not to use that column, as seen below. Also notice that we use `\hline` instead of `\sphline` when making tables with vertical lines.

```
\begin{tabular}{|c|c}\hline
 A          \\ \hline
 B          \\ \hline
\end{tabular}
```

Which will make a little table that looks like this:

A
B

To Illustrate an Algorithm

The \begin{algorithm}...\end{algorithm} may be used to illustrate an algorithm.

- Spaces and blank lines will be preserved. Math and font changes may be used.
- Line beginnings may be positioned with a \ , which may be used as many times as you need. A backslash followed by a space will provide a space a bit wider than the width of 2 'M's.
- If you want to break lines on the screen but not break the line in the results, use '%' at the end of line, as you see in the fifth line in this example.
- The command \bit will produce bold italics if you are using PostScript fonts, boldface in Computer Modern.
- \note{} will position the note on the right margin.

```
\begin{algorithm}
{\bit Evaluate-Single-FOE} ({\bf x$_f$, I$_0$, I$_1$}):
\ {\bf I}+ := {\bf I}$_1$;
\ ($\phi,\theta$) := (0,0);
\ {\it repeat}\note{/*usually only 1 interation required*/}
\ \ (s$_{opt}$${\bf E}$_\eta$) := {\bit Optimal-Shift}%
  ({\bf I$_0$,I$^+$,I$_0$,x$_f$});
\ \ ($\phi^+$, $\theta^+$) := {\bit Equivalent-Rotation} ({\bf s}$_{opt}$);
\ \ ($\phi$, $\theta$) := ($\phi$, $\theta$) + ($\phi^+$, $\theta^+$);
\ \ {\bf I}$^+$:= {\bit Derotate-Image} ({\bf I}$_1$, $\phi$, $\theta$);
\ \ {\it until} ($|\phi^+|\leq\phi_{max}$ \& $|\theta^+|\leq\theta_{max}$);
\ {\it return} ({\bf I}$^+$, $\phi$, $\theta$, E$_\eta$).
End pseudo-code.
\end{algorithm}
```

....

    Evaluate-Single-FOE ($\mathbf{x}_f$, $\mathbf{I}_0$, $\mathbf{I}_1$):
      $\mathbf{I}+ := \mathbf{I}_1$;
     $(\phi, \theta) := (0,0)$;
     repeat   /*usually only 1 interation required*/
       (s_{opt} $\mathbf{E}_\eta$) := *Optimal-Shift* ($\mathbf{I}_0$,$\mathbf{I}^+$,$\mathbf{I}_0$,$\mathbf{x}_f$);
       $(\phi^+, \theta^+) :=$ *Equivalent-Rotation* ($\mathbf{s}_{opt}$);
       $(\phi, \theta) := (\phi, \theta) + (\phi^+, \theta^+)$;
       $\mathbf{I}^+:=$ *Derotate-Image* ($\mathbf{I}_1$, ϕ, θ);
      until ($|\phi^+| \leq \phi_{max}$ & $|\theta^+| \leq \theta_{max}$);
     return ($\mathbf{I}^+$, ϕ, θ, E_η).
   End pseudo-code.

End of Article

Getting the end of article commands in the right order will not be difficult if you use the `procsamp.tex` template file. The commands should be used in this order: Acknowledgments (optional), Appendix (optional), References, and finally `\end{article}`.

```
%% End of article:

%% optional:
% \begin{glossary}
% \end{glossary}

%% optional:
%\begin{acknowledgements}
%\end{acknowledgements}

%% optional:
%\chapappendix{<Optional Chapter Appendix Letter or title>}
%\chapappendix{} % Untitled chapter appendix

\begin{references}
...
\end{references}

\end{article}
\end{document}
```

Glossary

An optional glossary section is available. Its commands are very straightforward:

```
\begin{glossary}
\term{xxx}Text...
\term{yyy}Text...
\end{glossary}
```

Here is an example:

```
\begin{glossary}
\term{GaAs}Gallium Arsinide. For similar device sizes GaAs transistors
have three to
five times greater transconductance than those of of silicon bipolar
and MOS transistors.

\term{VLSI}Very Large Scale Integration. Since the mid-1970's
VLSI technology has been successfully used in many areas, but its effect on
computers of all shapes and sizes has been the most dramatic. Some of the
application areas got boosts in performance while others became
feasible.

\end{glossary}
```

....

GLOSSARY

GaAs Gallium Arsinide. For similar device sizes GaAs transistors have three to five times greater transconductance than those of of silicon bipolar and MOS transistors.

VLSI Very Large Scale Integration. Since the mid-1970's VLSI technology has been successfully used in many areas, but its effect on computers of all shapes and sizes has been the most dramatic. Some of the application areas got boosts in performance while others became feasible.

ACKNOWLEDGEMENTS

```
\begin{acknowledgments}
We would like to thank....
\end{acknowledgments}
```

....

Acknowledgments

We would like to thank....

Appendices

There are two sets of appendix commands; those for the end of the chapter and those for an appendix at the end of the book.

END OF CHAPTER APPENDIX

An appendix to appear at the end of the book is made with the command \appendix{}, as seen below. If you want only one appendix, follow \appendix with facing curly brackets: \appendix{}.

Section numbers, equation numbers, and captions will all use the appendix letter as well as their number. Each new appendix will generate a new appendix letter.

Here are some appendix possibilities:

```
\chapappendix{This is a Chapter Appendix}
This is an appendix which is meant to appear in individual chapters
of the proceedings, not at the end of the book.

\begin{equation}
g_i(y|f)=\sum_x P(x|F_n)f_i(y|x)
\end{equation}

\chapappendix{}
This is a chapter appendix without a title
which is meant to appear in individual chapters
of the proceedings, not at the end of the book.

\begin{equation}
g_i(y|f)=\sum_x P(x|F_n)f_i(y|x)
\end{equation}
```

....

Appendix: This is a Chapter Appendix

This is an appendix which is meant to appear in individual chapters of the proceedings, not at the end of the book.

$$g_i(y|f) = \sum_x P(x|F_n)f_i(y|x) \tag{A.1}$$

Appendix B

This is a chapter appendix without a title which is meant to appear in individual chapters of the proceedings, not at the end of the book.

$$g_i(y|f) = \sum_x P(x|F_n)f_i(y|x) \tag{B.1}$$

Here is a longer example showing a figure, table and equation in the appendix:

```
\begin{figure}[h]
\caption{This is an appendix figure caption.}
\end{figure}

\begin{table}[h]
\caption{This is an appendix table caption.}
\centering
\begin{tabular}{ccc}
\hline
one&two&three\\
\hline
C&D&E\\
\hline
\end{tabular}
\end{table}

\begin{equation}
\alpha\beta\Gamma\Delta
\end{equation}

\chapappendix{}
This is a chapter appendix without a title ...
```

. . . .

Appendix: This is a Chapter Appendix

This is an appendix which is meant to appear in individual chapters of the proceedings, not at the end of the book.

Figure C.1.   This is an appendix figure caption.

Table C.1.   This is an appendix table caption.

one	two	three
C	D	E

$$\alpha\beta\Gamma\Delta \tag{C.1}$$

Appendix D

This is a chapter appendix without a title meant to appear in individual chapters of the proceedings, not at the end of the book.

$$e = mc^2 \tag{D.1}$$

End Notes and Footnotes

In this style the default is end notes rather than footnotes. The user enters the usual footnote command `\footnote{<text>}`. A number appears in the text as it would with a footnote, but with this style the note only appears at the end of the chapter when the user writes `\notes`.

```
Here is some sample text\footnote{Here is our first sample note}
to show how end notes print.

\notes
```

....

Here is some sample text[1] to show how end notes print.

Notes

1. Here is our first sample note

IF YOU WANT FOOTNOTES INSTEAD OF ENDNOTES

If you would rather have footnote at the bottom of the page, you may write this command below the documentstyle or documentclass command: `\let\footnote\savefootnote`.

If you would also like to have a ruled line appear above the footnote, you may write this:

`\let\footnoterule\savefootnoterule`.

References

Before \begin{document} in your proctmpl.tex file you will see the following information:

```
% Bibliography Style Settings:
% ============================
% Choose either kluwerbib or normallatexbib:

%%%
\kluwerbib % will produce this kind of bibliography entry:

%  Anderson, Terry L.,...
%    continuing bib entry here

%  \cite{xxx} will print without brackets around the citation.
% \bibliographystyle{kapalike} % should be used when you use \verb+\kluwerbib+.

%%%
%\normallatexbib %will produce bibliography entries as shown in the
                % LaTeX book

% [1] Anderson, Terry L.,
%     continuing bib entry

% \cite{xxx} will print with square brackets around the citation, i.e., [1].

% Any \verb+\bibliographystyle{}+ may be used with \verb+\normallatexbib+, but
% you should check with your editor to find the style preferred for
% your book.

% Change Brackets around Citation:
% ===============================

%% Default with \kluwerbib is no brackets around citation.
%% Default with \normallatexbib is square brackets around citation.

% For parens around citation uncomment these:

%\let\lcitebracket(
%\let\rcitebracket)

% For square brackets around citation uncomment these:

%\let\lcitebracket[
%\let\rcitebracket]

%%%%%%  <<== End Bibliography Style Settings
```

Using the Kluwerbib or Normallatexbib Bibliography Option

Unless you have a preference to use the normal LaTeX bibliography styles, you should leave `\kluwerbib` uncommented.

If you plan on using the `\cite{}` command, and are using `\kluwerbib`, remember that `\bibitem` should be used with the square bracket argument. With `\kluwerbib`, whatever is typed between square brackets after `\bibitem` will be printed when you use `\cite{}`.

When the square bracket argument is used:

```
Here is our citation: \cite{lacey}.
...
\bibitem[Lacey, 1968]{lacey}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.
```

....

   Here is our citation: Lacey, 1968.

If you forgot to use the square bracket argument, you will get the name of the symbolic label when you type `\cite{}`, i.e.,

---

```
Here is our citation: \cite{lacey}.
...
\bibitem{lacey}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.
```

....

   Here is our citation: lacey.

When using the `\normallatexbib` option, you don't have to use the square bracket argument, since the bibitems will be numbered and `\cite` will produce numbers.

CHAPTHEBIBLIOGRAPHY

Now you can use the \begin{chapthebibliography}{<widest bib entry>} command, which works like the
\begin{thebibliography}{<widest bib entry>} command, except that it can be used at the end of chapters.

Here is how bib entries will be formatted if you have uncommented the \kluwerbib command near the top of the file.

```
\kluwerbib %% <== above \begin{document}
...
Sample citations: \cite{lacey,oliva}.

\begin{chapthebibliography}{}
\bibitem[Anderson, et al]{ander}
Anderson, Terry L., and Fred S. McChesney. (n.d.). ''Raid or Trade?
An Economic Model of Indian-WhiteRelations,'' Political Economy Research
Center Working Paper 93--1.

\bibitem[Lacey, 1968]{lacey}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.

\bibitem[Oliva, 1971]{oliva}
Oliva, Pavel. (1971). {\it Sparta and Her Social Problems.} Amsterdam: Adolf
M. Hakkert.

\bibitem[Zimmern, 1961]{zimmern}
Zimmern, Alfred. (1961). {\it The Greek Commonwealth: Politics and Economics
in Fifth-Century Athens,}\/ 5th ed. New York: Galaxy Book, Oxford University
Press.
\end{chapthebibliography}
```

....

Sample citations: Lacey, 1968, Oliva, 1971.

References

Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-WhiteRelations," Political Economy Research Center Working Paper 93–1.

Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

Oliva, Pavel. (1971). *Sparta and Her Social Problems*. Amsterdam: Adolf M. Hakkert.

Zimmern, Alfred. (1961). *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens,* 5th ed. New York: Galaxy Book, Oxford University Press.

If you use \normallatexbib your bibliography will format just as it would with a standard LaTeX style.

```
\normallatexbib %% <== above \begin{document}
...
Sample citations: \cite{raidtrade,sparta}.

\begin{chapthebibliography}{1}
\bibitem{raidtrade}
Anderson, Terry L., and Fred S. McChesney. (n.d.). ''Raid or Trade?
An Economic Model of Indian-WhiteRelations,'' Political Economy Research
Center Working Paper 93--1.

\bibitem{history}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.

\bibitem{sparta}
Oliva, Pavel. (1971). {\it Sparta and Her Social Problems.} Amsterdam: Adolf
M. Hakkert.

\bibitem{earlygreek}
Zimmern, Alfred. (1961). {\it The Greek Commonwealth: Politics and Economics
in Fifth-Century Athens,}\/ 5th ed. New York: Galaxy Book, Oxford University
Press.
\end{chapthebibliography}
```

....

Sample citations: [1,3].

References

[1] Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-WhiteRelations," Political Economy Research Center Working Paper 93–1.

[2] Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

[3] Oliva, Pavel. (1971). *Sparta and Her Social Problems.* Amsterdam: Adolf M. Hakkert.

[4] Zimmern, Alfred. (1961). *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens,* 5th ed. New York: Galaxy Book, Oxford University Press.

Using symbolic names for your bibliography is done as you see below, using the \normallatexbib command.

```
Sample citations: \cite{xraidtrade,xsparta}.

\begin{chapthebibliography}{AnderMcC}
\bibitem[AnderMcC]{xraidtrade}
Anderson, Terry L., and Fred S. McChesney. (n.d.). ''Raid or Trade?
An Economic Model of Indian-WhiteRelations,'' Political Economy Research
Center Working Paper 93--1.

\bibitem[Lacey68]{xhistory}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.

\bibitem[Oliva71]{xsparta}
Oliva, Pavel. (1971). {\it Sparta and Her Social Problems.} Amsterdam: Adolf
M. Hakkert.

\bibitem[Zim61]{xearlygreek}
Zimmern, Alfred. (1961). {\it The Greek Commonwealth: Politics and Economics
in Fifth-Century Athens,}\/ 5th ed. New York: Galaxy Book, Oxford University
Press.
\end{chapthebibliography}
```

....

Sample citations: [AnderMcC; Oliva71].

References

Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-WhiteRelations," Political Economy Research Center Working Paper 93–1.

Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

Oliva, Pavel. (1971). *Sparta and Her Social Problems*. Amsterdam: Adolf M. Hakkert.

Zimmern, Alfred. (1961). *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens,* 5th ed. New York: Galaxy Book, Oxford University Press.

CHANGING THE BRACKET AROUND THE CITATION

If you want to set the bracket around the citation to parens, you can do it at the top of your file:

```
%%%%%% To change brackets around citation ==>>
% Default with \kluwerbib is no brackets around citation.
% Default with \normallatexbib is square brackets around citation.

%If you want parens, around citation, i.e., (citation), uncomment these lines:
\let\lcitebracket(
\let\rcitebracket)
```

Then the citation will look like:

```
\let\lcitebracket(
\let\rcitebracket)
...
Sample citations: \cite{xraidtrade,xsparta}.
```

....

Sample citations: (AnderMcC,Oliva71).

Using BibTeX for your Chapter References

Using BibTeX is a bit more effort, but the major advantage is that you can build a database of your references that you can reuse for other books or articles.

To use BibTeX to make your chapter bibliography you will follow the usual LaTeX method, but you must also use two new commands: \chapbblname and \chapbibliography, along with the familiar \bibliographystyle.

The \chapbblname command is needed to let LaTeX know which .bbl file to use since there will be presumably more than one bibliography in the complete book. The \chapbibliography command makes the bibliography print in the style appropriate to a bibliography appearing in a chapter.

```
\bibliographystyle{<name of a .bst file>} % Choose the BibTeX style

\chapbblname{<name of a .bbl file>}
            % The .bbl file appears after you run BibTeX
            % on your file; its name will be the same as the
            % file name, but with a .bbl extension

\chapbibliography{<name of one or more .bib files>}
            % .bib files are the bibliography database
```
Follow these steps.

1. **PREPARATION**

   Make a .bib file

   If you do not already have one or more .bib files, make a `xxx.bib` file, with 'xxx' being any file name you choose. The .bib file or files are a database of references. Please see Leslie Lamport's *LaTeX A Document Preparation System* for information on the form of entries in the .bib file.

   Enter Citations

   Write either \cite{<label>} or \nocite{<label>} for each reference that you want to appear in the bibliography. The name of the <label> is found in the .bib file.

   Each citation pull an entry from the .bib file with the same label name and make it appear in the bibliography.

   There is also a command called \nocite which is used in the same way as \cite but will not print a citation. Its only purpose is to cause the matching entry to be pulled from the database and added to the .bbl file when BibTeX is run on the .tex file.

   For example:

```
Here are some more citations
\cite{dms80}, \cite{gm91}, \cite{hhmz77,hb85},
\cite{kt78}. \nocite{kl94}
```

2. **COMMANDS TO ENTER IN YOUR .TEX FILE**

   Supply a Bibliography Style

   Use kapalike or alpha for the bibliographystyle:

```
\bibliographystyle{kapalike}
```

   The kapalike.bst file may be downloaded from the Kluwer ftp site, in the same directory as you found the other book files:
   http://www.wkap.nl/authors/bookstylefiles/latexstyles.

Please put kapalike.bst in the same directory where you are working, or in a directory where BibTeX can find it when it is running.

Supply a .bbl file name

Write `\chapbblname{<name of your bbl file>}`
with the name of your bbl file being the name of the file you are writing, i.e, if you are working in a file named chap1.tex, the name you should supply is

`\chapbblname{chap1}`

Supply a .bib file name, or names

Next you must write `\chapbibliography{xxx}`, with 'xxx' being the name of the .bib database file that you have written. You can also use more than one .bib file, in which case you must separate the filenames with a comma: `\chapbibliography{xxx,yyy}`.

For example:

```
\bibliographystyle{kapalike}
\chapbblname{chap1}
\chapbibliography{bkbib}
```

3. MAKING THE .BBL FILE

Run LaTeX on your file

Once the citations are entered in your text, you can run LaTeX on the file. This step is needed to send label information to the .aux file, which will tell BibTeX which entries should be taken from the .bib database and used in the .bbl file that it will make.

Run BibTeX on your file to produce a .bbl file

Use the BibTeX program to make the .bbl file, by entering the command `bibtex filename` with filename being the .tex file you are working on, without the .tex extension.

If the .tex file is named chap1.tex you will produce a file named chap1.bbl.

Run LaTeX on your file two more times

After you have a .bbl file, you should run LaTeX on your .tex file to produce a formatted bibliography.

The next time you run LaTeX on your file your citations will appear. (You must run LaTeX on the file one final time so that the entries in the bibliography are able to send information about the text of the citations to the .aux file.)

4. SENDING IN THE BBL FILE

You have two choices at this point:

1) Either send the .bbl file in to the editor at the same time that you submit your chapter, or

2) Copy the `\bibitems` from your .bbl file and drop them into a `\chapthebibliography` environment. If you follow this path, you will no longer need the commands you originally entered, `\bibliographystyle{}`, `\chapbblname{}`, or `\chapbibliography{}`. This option may be preferable in that there is greater assurance that the .bbl file will not become separated from the .tex file.
```
\begin{chapbibliography}
<add bibitems here>
\end{chapbibliography}
```

Commands for the end of the Book: End Matter

The end of the book should use this order:

```
Glossary %% optional
Appendices %% optional
Bibliography
Index
```

GLOSSARY

You've seen how to format a glossary on page 37. If you make the glossary at the end of a chapter or at the end of the book the commands are identical.

END OF BOOK APPENDIX

The appendix commands at the end of the book are exactly the same, except that they use `\appendix{}` instead of `\chapappendix{}`.

If you want only one appendix, follow `\appendix` with facing curly brackets: `\appendix{}`.

Section numbers, equation numbers, and captions will all use the appendix letter as well as their number. Each new appendix will generate a new appendix letter.

Here are some appendix possibilities:

```
\appendix{}
This is an appendix.
\begin{equation}\sum_k P(k) \sum_i \sum_y f_i(y|k)^2\end{equation}

\appendix{Pspace $\supseteq$ PCP(log n)}
....
```

Appendix

This is an appendix.

$$\sum_k P(k) \sum_i \sum_y f_i(y|k)^2 \tag{A.1}$$

Appendix: Pspace $\supseteq$ PCP(log n)

This is an appendix.

$$\sum_k P(k) \sum_i \sum_y f_i(y|k)^2 \tag{B.1}$$

Bibliography at end of Book

The commands `\begin{thebibliography}{<widest label>}`... `\end{thebibliography}` may be used to format the bibliography at the end of the book.

The appearance of the bibliography will differ depending on whether `\kluwerbib` or `\normallatexbib` has been uncommented at the beginning of the file.

If you plan on using the `\cite{}` command, and are using `\kluwerbib`, remember that `\bibitem` should be used with the square bracket argument. With `\kluwerbib`, whatever is typed between square brackets after `\bibitem` will be printed when you use `\cite{}`.

Using thebibliography

You can use the LaTeX command `\begin{thebibliography}{<widest label>}` at the end of the book, and use `\bibitem` with or without the optional argument in square brackets. The appearance will differ depending on whether you uncommented `\kluwerbib` or `\normallatexbib` at the beginning of the file.

```
\kluwerbib %% <== above \begin{document}
...
\begin{thebibliography}{}
\bibitem[Anderson, et al]{ander}
Anderson, Terry L., and Fred S. McChesney. (n.d.). ''Raid or Trade?
An Economic Model of Indian-WhiteRelations,'' Political Economy Research
Center Working Paper 93--1.

\bibitem[Lacey, 1968]{lacey}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.

\bibitem[Oliva, 1971]{oliva}
Oliva, Pavel. (1971). {\it Sparta and Her Social Problems.} Amsterdam: Adolf
M. Hakkert.
\end{thebibliography}
```

....

References

Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-WhiteRelations," Political Economy Research Center Working Paper 93–1.

Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

Oliva, Pavel. (1971). *Sparta and Her Social Problems.* Amsterdam: Adolf M. Hakkert.

When you have used \normallatexbib your bibliography will format just as it would with a standard LATEX style.

```
\normallatexbib %% <== above \begin{document}
...
\begin{thebibliography}{1}
\bibitem{raidtrade}
Anderson, Terry L., and Fred S. McChesney. (n.d.). ''Raid or Trade?
An Economic Model of Indian-WhiteRelations,'' Political Economy Research
Center Working Paper 93--1.

\bibitem{history}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.

\bibitem{sparta}
Oliva, Pavel. (1971). {\it Sparta and Her Social Problems.} Amsterdam: Adolf
M. Hakkert.

\bibitem{earlygreek}
Zimmern, Alfred. (1961). {\it The Greek Commonwealth: Politics and Economics
in Fifth-Century Athens,}\/ 5th ed. New York: Galaxy Book, Oxford University
Press.
\end{thebibliography}
```

....

References

[1] Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-WhiteRelations," Political Economy Research Center Working Paper 93–1.

[2] Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

[3] Oliva, Pavel. (1971). *Sparta and Her Social Problems.* Amsterdam: Adolf M. Hakkert.

[4] Zimmern, Alfred. (1961). *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens,* 5th ed. New York: Galaxy Book, Oxford University Press.

If you want to use a symbolic name for your references, please use \normallatexbib, and the symbolic name in square brackets after \bibitem:

```
\begin{thebibliography}{AnderMcC}
\bibitem[AnderMcC]{raidtrade}
Anderson, Terry L., and Fred S. McChesney. (n.d.). ''Raid or Trade?
An Economic Model of Indian-WhiteRelations,'' Political Economy Research
Center Working Paper 93--1.

\bibitem[Lacey68]{history}
Lacey, W.K. (1968). {\it History of Socialism}. Ithaca, NY: Cornell
University Press.

\bibitem[Oliva71]{sparta}
Oliva, Pavel. (1971). {\it Sparta and Her Social Problems.} Amsterdam: Adolf
M. Hakkert.

\bibitem[Zim61]{earlygreek}
Zimmern, Alfred. (1961). {\it The Greek Commonwealth: Politics and Economics
in Fifth-Century Athens,}\/ 5th ed. New York: Galaxy Book, Oxford University
Press.
\end{thebibliography}
```

....

References

[AnderMcC] Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-WhiteRelations," Political Economy Research Center Working Paper 93–1.

[Lacey68] Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

[Oliva71] Oliva, Pavel. (1971). *Sparta and Her Social Problems.* Amsterdam: Adolf M. Hakkert.

[Zim61] Zimmern, Alfred. (1961). *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens,* 5th ed. New York: Galaxy Book, Oxford University Press.

USING BibTEX FOR REFERENCES FOR END OF BOOK

The same series of steps that were described earlier to make a chapter bibliography are also followed to make a BibTEX bibliography at the end of the book. The only differences are that for the end of the book you may use the command `\bibliography{}` instead of `\chapbibliography{}` and you no longer need `\chapbblname{}`.

To recap the steps needed to use BibTeX:

Make a .bib file If you do not already have one or more .bib files, make a `xxx.bib` file, with 'xxx' being any file name you choose. The .bib file or files are a database of references. Please see Leslie Lamport's *LATEX A Document Preparation System* for information on the form of entries in the .bib file.

Supply a Bibliography style Use kapalike or alpha for the bibliographystyle:

`\bibliographystyle{kapalike}`

The kapalike.bst file may be downloaded from the Kluwer ftp site, in the same directory as you found the other book files: `www.wkap.nl/kaphtml.htm/LATEXSTYLES`.

Please put kapalike.bst in the same directory where you are working, or in a directory where BibTeX can find it.

Run BibTeX on your file to produce a .bbl file Write either `\cite{<label>}` or `\nocite{<label>}` for each reference that you want to appear in the bibliography. Each citation will make a matching entry appear in the bibliography.

`\cite` will produce a printed citation, `\nocite` will not print, but in either case he citation will appear in the finished bibliography.

Next you must write `\bibliography{xxx}`, with 'xxx' being the name of the .bib database file that you have written. You can also use more than one .bib file, in which case you must separate the filenames with a comma: `\bibliography{xxx,yyy}`.

For example:

```
Here are some more citations
\cite{dms80}, \cite{gm91}, \cite{hhmz77}, \cite{hb85},
\cite{kt78}. \nocite{kl94}

\bibliographystyle{kapalike}
\bibliography{procbib}
```

Run BibTeX on the file If the file is named mybook.tex this will produce a file named mybook.bbl.

Run LATEX on your file to print your citations The next time you run LATEX on your file your citations will appear.

Sending the .bbl file If you are sending the .tex file for the proceedings to anyone else, please remember to also send the .bbl file.

Here is the sample bibliography that results from taking the steps we have just listed:

```
\kluwerbib %% before \begin{document}
...
\bibliographystyle{kapalike}
\bibliography{ProcBib}
```

....

References

Barrett, J. W. and Morton, K. W. (1984). Approximate symmetrization and Petrov-Galerkin methods for diffusion-convection problems. *Comput. Methods Appl. Mech. Engrg.*, 45:97–122.

Benedetto, J. (1975). *Spectral Synthesis*. Academic Press, New York.

Benedetto, J. (1990). Uncertainty principle inequalities and spectrum estimation. In Byrnes, J. S. and Byrnes, J. L., editors, *Recent Advances in Fourier Analysis*, NATO-ASI Series C, pages 143–182. Kluwer Academic Publishers.

Chui, C. K. and Wang, J. Z. A cardinal spline approach to wavelets. *Proc. Amer. Math. Soc.* to appear.

Daubechies, I. (1990). The wavelet transform, time-frequency localization and signal analysis. *IEEE Trans. Inform. Theory*, 36:961–1005.

García-Archilla, B. and Mackenzie, J. A. (1991). Analysis of a supraconvergent cell vertex finite volume method for one-dimensional convection-diffusion problems. Technical Report NA91/13, Oxford University Computing Laboratory, 11 Keble Road, Oxford, OX1 3QD. submitted for publication.

Heinrich, J. C., Huyakorn, P. S., Mitchell, A. R., and Zienkiewicz, O. C. (1977). An upwind finite element scheme for two-dimensional convective transport equations. *Internat. J. Numer. Methods Engrg.*, 11:131–143.

Here is the bibliography if we uncomment \normallatexbib:

```
\normallatexbib %% before \begin{document}
...
\bibliographystyle{alpha}
\bibliography{ProcBib}
```

....

References

[BarMor84]   Barrett, J. W. and Morton, K. W. (1984). Approximate symmetrization and Petrov-Galerkin methods for diffusion-convection problems. *Comput. Methods Appl. Mech. Engrg.*, 45:97–122.

[Ben75]   Benedetto, J. (1975). *Spectral Synthesis*. Academic Press, New York.

[Ben90]   Benedetto, J. (1990). Uncertainty principle inequalities and spectrum estimation. In Byrnes, J. S. and Byrnes, J. L., editors, *Recent Advances in Fourier Analysis*, NATO-ASI Series C, pages 143–182. Kluwer Academic Publishers.

[ChuiWang]   Chui, C. K. and Wang, J. Z. A cardinal spline approach to wavelets. *Proc. Amer. Math. Soc.* to appear.

[Daub90]   Daubechies, I. (1990). The wavelet transform, time-frequency localization and signal analysis. *IEEE Trans. Inform. Theory*, 36:961–1005.

[GarMac91]   García-Archilla, B. and Mackenzie, J. A. (1991). Analysis of a supraconvergent cell vertex finite volume method for one-dimensional convection-diffusion problems. Technical Report NA91/13, Oxford University Computing Laboratory, 11 Keble Road, Oxford, OX1 3QD. submitted for publication.

[Hein77]   Heinrich, J. C., Huyakorn, P. S., Mitchell, A. R., and Zienkiewicz, O. C. (1977). An upwind finite element scheme for two-dimensional convective transport equations. *Internat. J. Numer. Methods Engrg.*, 11:131–143.

Making Your Index

There are two choices when making your index with this Kluwer style: The LaTeX Makeindex system and the Kluwer Indexing Macro set. Please be careful not to confuse the two methods.

MAKEINDEX

Authors wanting to use the Makeindex commands may do so with this macro set. Consult the documentation, makeinde.tex, that comes with the LaTeX distribution.

Your input will look something like this:

For LaTeX2.09 Users:

```
\documentstyle[makeidx]{kbk}
\makeindex
\begin{document}
Borden's symbol, Elsie the cow, is a Jersey, a kind of
cow characterized by a carmel colored coat and large dark eyes.\index{Jersey}
...
\printindex
```

For LaTeX2e Users:

```
\documentclass{kbk}
\usepackage{makeidx}
\makeindex
\begin{document}
Borden's symbol, Elsie the cow, is a Jersey, a kind of
cow characterized by a carmel colored coat and large dark eyes.\index{Jersey}
...
\printindex
```

Kluwer Indexing Method

Here is another set of commands that will produce a two-column index. There are many useful features found in this set of indexing commands which you will see demonstrated in the following sections.

INDEXING COMMANDS

This macro package includes an indexing method which should make it very easy to compile an index.

The Index commands:

\inx{term} will print 'term' in text but will also send 'term' and its page number to the .inx file.

\inxx{term} will not print in text but will send term and its page number to the .inx file.

\inxx{term,second term} will not print in text but will send 'second term' to inx file to print underneath 'term' in the index.

To make the index:

1) Enter index markup in the text,

2) Run Latex on file,

3) Run sort routine on file (ie. 'sort < filename.inx > filename.srt' on DOS, other commands on other systems), to produce a filename.srt file.

4)\kluwerprintindex at end of book will input filename.srt and print index. The index will be in two columns, sequences of page numbers for the same entry will automatically have a dash between them, and subheadings will fall underneath their major headings.

MARKING THE TEXT

There are two kinds of index entries in the text:
\inx{word or words}, and
\inxx{word or words}.

The first form will print the term between curly brackets on the page and will also send it to an .inx file along with the current page number.

The second, called a 'silent' entry, will not print on the page but will send the material between curly brackets to the .inx file along with the current page number.

CAREFUL: Do not leave an empty space between the silent index entry and the word preceding it. An extra space will appear in your text if there is a space both before and after the \inxx command. Your input should look like this:

...some words\inxx{index entry}...
Not
...some words \inxx{index entry}...

Remember that starting a new line in your editor will also generate an empty space, so do not do this either:

...some words
\inxx{index entry}...

You can enter index commands in a figure or table caption, but please precede it with `\protect`

```
\begin{figure}[h]
\caption{\protect\inx{Oscillograph} for memory address access operations,
showing 500 ps address access time and \protect\inx{superimposed signals}%
\protect\inxx{address,superimposed signals} of address access in 1 kbit
memory plane.}
\end{figure}
```

....

Figure B.1. Oscillograph for memory address access operations, showing 500 ps address access time and superimposed signals of address access in 1 kbit memory plane.

Do not use one or more `\inxx{term}`s immediately after a section head:

```
\section{Introduction}% Do Not use \inxx{term} immediately after a section
  % head because that will allow LaTeX to separate the section head from the
  % following text.
Here is some normal text.\inxx{indexterm}
Here is some normal text.
```

Subheadings in the Index

To form an index entry as a subheading of another index entry, repeat the first entry and follow it with the new entry.

For example:

After you have typed `\inx{trees}` or `\inxx{trees}`,

you may type `\inxx{trees,green}` to cause 'green' and its associated page number to be placed in the index under the entry for 'trees.'

A third level of subheading is produced in the same way:
`\inxx{trees,green,pointy}`. This will format 'pointy' underneath the entry for 'green'.

LATEXING THE FILE

When you LATEX `filename.tex` containing the marked entries you will produce a `filename.inx`.

SORTING THE `.inx` FILE

You can sort the `filename.inx` file with a sorting routine on your system.
The MS-DOS command is `sort < filename.inx > filename.srt`.
The Vax VMS command is `sort filename.inx filename.srt`.
The UNIX command is `sort -f filename.inx > filename.srt`.
Apparently there is no sort routine as part of the Macintosh software but there are public domain Macintosh sorting packages available.

MARKING THE `.srt` FILE

If you want to make additions to the index entries such as "See Also Douglas Firs" or to change the fonts of certain entries or to add a large letter and a ruled line before each new alphabetical group, you can do this in `filename.srt`. However, you do not need to even look at this file if you do not wish to make changes to the index.

For more information see "Making typeface changes to index entries" and "Adding material to your sorted file" below.

PRINTING THE INDEX

The command: `\kluwerprintindex` will print the index. This command will input the `filename.srt` file to generate your index, formed in double columns, with a dash between sequential page numbers and with subsidiary entries formatted below their major entry.

More information on each step follows.

ENTERING WORDS TO BE INDEXED IN THE TEXT

As described earlier, entries are to be marked either

`\inx{(entry)}`

or

`\inxx{(entry)}`

CAREFUL: When you mark an index entry with `\inx` the word or words will print in the text as well as in the auxiliary file.

However, don't try to use this method of marking a word or phrase if it is in the argument of another macro.

To index a word or words that are inside a macro argument, use the second method: rewrite the word or words outside the macro and precede it with `\inxx`. If in doubt follow the second method which may be slightly more effort, but whose results will be more predictable.

Tᴏ ᴄᴀʟʟ ᴀᴛᴛᴇɴᴛɪᴏɴ ᴛᴏ ᴀ ᴘᴀʀᴛɪᴄᴜʟᴀʀ ᴘᴀɢᴇɴᴜᴍʙᴇʀs ɪɴ ᴛʜᴇ ɪɴᴅᴇх:

You may mark index entries with one or two asterisks.

\inx{index entry∗} or \inxx{index entry∗} will cause the page number to be underlined.

\inx{index entry∗∗} or \inxx{index entry∗∗} will cause the page number to appear in bold-face. You may want to use this as a method of calling attention to the definition of a term (underlined) or an example of the term in use (boldface).

Eхᴀᴍᴘʟᴇs ᴏꜰ ꜰɪʀsᴛ, sᴇᴄᴏɴᴅ ᴏʀ ᴛʜɪʀᴅ ʟᴇᴠᴇʟ ɪɴᴅᴇх ᴇɴᴛʀɪᴇs

As mentioned above, second level entries are produced by writing the primary term, then a comma, then the word you are indexing. For example, index entries written on a page 33:
\inx{First Level} (or \inxx{First Level})
\inxx{First Level,Second Level}
will yield the index entries
    First Level, 33
      Second Level, 33
with the page numbers produced automatically.

The third level is produced similarly:
\inx{First Level} (or \inx{First Level})
\inxx{First Level,Second Level}
\inxx{First Level,Second Level,Third Level}
Results in:
    First Level, 33
      Second Level, 33
        Third Level, 101

CAREFUL:

Spaces: Notice that there are no spaces after the comma in the index entry. It is important to keep spaces from appearing between entry levels for the index formatter to work correctly.

Consistency: Capital and small letters will not be distinguished by the index formatter but will be sorted differently. Therefore you must be careful to be consistent in capitalization.

Commas: Since commas are used to separate arguments in the index entries, you must write \, when you actually want a comma to appear in the formatted index. For example:

\inxx{Nixon\, Richard Milhous}

will print in the index as:

    Nixon, Richard Milhous, 72

If you forgot to put the backslash in front of the comma after 'Nixon' as in the following:

\inxx{Nixon, Richard Milhous}

The results will be

    Nixon
      Richard Milhous, 72

Hᴏᴡ ᴛᴏ ᴍᴀᴋᴇ ᴀ ꜰɪʀꜱᴛ ᴏʀ ꜱᴇᴄᴏɴᴅ ʟᴇᴠᴇʟ ᴇɴᴛʀʏ *Without* ᴘᴀɢᴇ ɴᴜᴍʙᴇʀꜱ

You may occassionally want to have a major or secondary index entry that doesn't have a page number associated with it, but is used as a heading for the following entries.

To do this, type the second or third level entries as you would do ordinarily, but do not make an index entry for the first level term by itself.

For example, if these \inxx entries have been used in the text:
\inxx{Cows,Holstein-Friesen}
\inxx{Cows,Jersey}
\inxx{Cows,Holy}
The index will look like this:

> Cows
>> Holstein-Friesen, 33
>> Jersey, 43
>> Holy, 23

The same sequence follows for second and third level entries; when the third level is being looked at by the index formatter it will check to see if the second level has been printed. If it hasn't the formatter will supply the second level entry without a page number.

The second level without a page number is produced like this:
\inxx{Cows,Four-legged,black and white}
\inxx{Cows,Four-legged,gentle brown}
\inxx{Cows,Four-legged,invisible}

Results in:

> Cows
>> Four-legged
>>> black and white, 101
>>> gentle brown, 201
>>> invisible, 32

Iɴᴅᴇx Eʀʀᴏʀ Cᴏɴᴛʀᴏʟ

You might have inadvertantly neglected to supply a first level entry and asked for second or third level entries that were to appear under the first level entry. In this case the index formatter will supply the first level entry without a page number, just as if that was your intention. Similarly, if third level entries have been called for without the preceding second level entry ever being asked for by itself, the second level entry will print without a page number, as if that was your intention.
Thus, you have a method of index error control, that will let you know if you neglected to enter a term with \inxx that you intended. Scan your completed index to see if there are entries without page numbers. If this was not your intention, either edit your original file to supply the appropriate \inxx term, or edit the .srt file to supply the term and page number.

OK, THE INDEX ENTRIES ARE MARKED, NOW WHAT?

The first thing to do is LATEX the file that contains the marked index entries.

You will automatically produce an auxilary file named `filename.inx` with 'filename' being the name of the file you LATEXed and the `.inx` extension being added automatically.

HOW TO SORT THE `.inx` FILE

The next step is to sort the contents of the file. On a VAX running VMS, you do this by typing
`sort filename.inx filename.srt`.
The UNIX command is `sort -f filename.inx > filename.srt`.
The MS-DOS command is `sort <filename.inx > filename.srt`.
If you are using another system, you must find the sorting command for that system.

LOOKING AT THE `.srt` FILE

You can look at the sorted file in your editor. Notice that the page numbers that are less than 10 will be preceded with two zeros, and those that are more than 10 but less than 100 will be preceded with one zero. These 'leading zeros' will not print but are necessary for the sort algorithm to work correctly.

SPECIAL USE CHARACTERS: > AND ˜

There is a '>' at the top of the `.srt` file and a '˜' at the end of the file. These are commands to make the index formatter work correctly. > must immediately precede the index entries and ˜ must immediately follow them, so do not change their position.

You can use ˜ as you would normally, except you **may not** use ˜ at the beginning of an index entry (and I can think of no reason that you would want to) except as an accent (\˜ ...).

MAKING CHANGES IN THE `.srt` FILE

You can make typeface changes, add or delete index entries, add comments to the index with the \addtoindex command, and separate the index into alphabetical sections with the use of the \ltr command. However, remember: These changes will disappear the next time you sort the .inx file to produce a new `.srt` file.

MAKING TYPEFACE CHANGES TO INDEX ENTRIES

If you want to change the typeface of an index entry, you can do this in your sorted file with these commands:

```
\indexit{index entry} |1{003}
\indexbf{index entry} |1{003}
\indextt{index entry} |1{003}
\indexsl{index entry} |1{003}
```

As you may have guessed, \indexit will produce *italics*, \indexbf will produce **bold face**, \indextt will produce `typewriter font`, and \indexsl will produce *slanted typeface*.

Assuming that you will be using this command on first level index entries, each of these commands will cause the first letter to be capitalized. If you want the first letter to be lower-case use this form:

```
\lcindexit{index entry} |1{003}
\lcindexbf{index entry} |1{003}
\lcindextt{index entry} |1{003}
\lcindexsl{index entry} |1{003}
```

If you change the typeface on any index entry, remember to do the same thing for every entry of the term on the same level. The reason that this is important is that the index formatter will not recognize two entries as being the same if one is '`\indexbf{index entry}`'

and the next is '`index entry`'. If the formatter sees the entries as different, the second entry would print on its own line.

Using `\addtoindex`

If you want to add a comment to your index you can enter the commands `\addtoindex...\endadd`. These commands will temporarily interrupt the index formatter and allow you to enter text or extra vertical space at any point in the index. See examples of this in 'Indexing Examples' following.

You must end `\addtoindex` with `\endadd`. Here is a complete example;

```
Grass |1{001}
\addtoindex
\seealso{Blue-green grass.}
\endadd
```

Making a page range to use with ff

If you want to direct your reader to a page range in which he/she will find information on a particular topic, you can use `\addtoindex`:

```
\addtoindex
Grass, 51--65 {\it ff}
\endadd
```

or

```
\addtoindex
\seealso{Grass, 51--65 {\it ff}}
\endadd
```

Separating index into alphabetical sections

Before the first entry for each new letter, use
`\addtoindex, \vskip\medskip, \endadd`.
For instance, before the B's:

```
\addtoindex
\vskip\medskip
\endadd
```

Other editing changes in the `.srt` file

You can also edit the `.srt` file in other ways, if you'd like. You can add or delete entries, or change the page number to appear underlined or bold by adding `\global\spcount =1` or `\global\spcount =2` within the curly brackets that surround the page number.

Formatting the Index

Once you have made any desired changes to your `.srt` file you can format the index in the originating file by writing this command where you want the index to appear:

`\kluwerprintindex`

Changing the Format of the Index

Automatic Capitalization of the First Letter

Your index will be formatted automatically with the first letter of each first level index term being capitalized. The second and third level index terms will not print in uppercase unless they were typed that way with the `\inxx` command. If for any reason you do not like this, you can read the instructions at the end of the macro file where you see this:

```
%% CHANGE INDEX FORMAT HERE ====>

%% If you DO NOT want the first letter of each first level index
%% entry to be capitalized, delete the % in front of the following line,
%% and put % in front of the next line:

%\let\capthis\relax
\def\capthis#1{\uppercase{#1}}%

\indexindent=8pt %% indentation for index subentries
\indexwrap=24pt  %% indentation when term is too wide for column,
                 %% continues on following lines indented this much.
```

These commands can be changed to meet your requirements.

Indexing Examples

Sample of text marked for indexing

```
Here is \inx{Edward Bear*}, coming downstairs, bump, bump,bump,
on the back of his head, behind \inx{Christopher Robin}.  It is,
as far as he knows, the only way of \inx{coming downstairs}, but
sometimes he feels\inxx{coming downstairs,bumping}\inxx{coming
downstairs,stop bumping} that there really is another way, if
only he could stop bumping for a moment and think of it.

\newpage
And then he feels that perhaps there isn't.  Anyhow, here he is
at the bottom, and ready to be introduced to you\inxx{coming
downstairs,stop bumping,at the bottom}. \inx{Winnie-the-Pooh**}.
```

```
\newpage
\subsection{One Day}
One day when he was out walking, he came to an open place in the
middle of the forest, and in the middle of this place was a
large \inx{oak-tree}, and, from the top of the tree, there came a
loud buzzing-noise.\inxx{oak-tree,large}\inxx{oak-tree,large,top}
\inxx{buzzing}\inxx{buzzing-noise}

\newpage
Winnie-the-Pooh sat down at the foot of the tree, put his head
between his paws and began to think.\inxx{oak-tree,large,foot}
\inxx{trees,oak}\inxx{trees,maple}\inxx{trees,pine}
```

SAMPLE .INX FILE

When TEX is run on the preceding text an .inx file will be made. It will look like this:

```
>
~
Edward Bear |{001\global \spcount =1}
Christopher Robin |{001}
coming downstairs |{001}
coming downstairs,bumping |{001}
coming downstairs,stop bumping |{001}
coming downstairs,stop bumping,at the bottom |{002}
Winnie-the-Pooh |{002\global \spcount =2}
oak-tree |{003}
oak-tree,large |{003}
oak-tree,large,top |{003}
...
```

S<small>AMPLE</small> .<small>SRT</small> <small>FILE</small>

The `.inx` file must be sorted to produce a .srt file. That file will look like the following example. Notice the leading zeros which are needed for the sorting algorithm to work correctly.

```
>
buzzing |{003}
buzzing-noise |{003}
coming downstairs |{001}
coming downstairs,bumping |{001}
coming downstairs,stop bumping |{001}
coming downstairs,stop bumping,at the bottom |{002}
Christopher Robin |{001}
Edward Bear |{001\global\spcount =1}
oak-tree |{003}
oak-tree,large |{003}
oak-tree,large,foot |{004}
oak-tree,large,top |{003}
...
~
```

S<small>AMPLE</small> <small>FORMATTED</small> <small>INDEX</small>

The command \kluwerprintindex will cause the .srt file to be input into the original file. Notice 'trees' which was never a first level entry, but is used as the first part of several second level entries, and so is formatted as an entry without a page number. The index will be formatted and look like this:

Buzzing, 3
Buzzing-noise, 3
Coming downstairs, 1
  bumping, 1
  stop bumping, 1
    at the bottom, 2
Christopher Robin, 1
Edward Bear, <u>1</u>
Oak-tree, 3
  large, 3
    foot, 4
    top, 3
Trees
  maple, 4
  oak, 4
  pine, 4
Winnie-the-Pooh, **2**

MAKING CHANGES OR ADDITIONS TO THE `.srt` FILE

Here is the same .srt file with some comments added with \addtoindex, and Winnie-the-Pooh changed to boldface:

```
>
buzzing |{003}
buzzing-noise |{003}
\addtoindex
\seealso{oak-tree}
\endadd
coming downstairs |{001}
coming downstairs,bumping |{001}
coming downstairs,stop bumping |{001}
coming downstairs,stop bumping,at the bottom |{002}
Christopher Robin |{001}
\addtoindex
Christopher Robin's relationship to animals, 1--99 {\it ff}
\endadd
Edward Bear |{001\global\spcount =1}
oak-tree |{003}
oak-tree,large |{003}
oak-tree,large,foot |{004}
oak-tree,large,top |{003}
trees,maple |{004}
trees,oak |{004}
trees,pine |{004}
\indexbf{Winnie-the-Pooh} |{002\global\spcount =2}
~
```

Which will produce this index:

Buzzing, 3
Buzzing-noise, 3
    See also oak-tree
Coming downstairs, 1
  bumping, 1
  stop bumping, 1
    at the bottom, 2
Christopher Robin, 1
Christopher Robin's relationship to ani-
    mals, 1–99 *ff*
Edward Bear, 1
Oak-tree, 3
  large, 3
    foot, 4
    top, 3
Trees
  maple, 4
  oak, 4
  pine, 4
Winnie-the-Pooh, **2**

To make a separation between index entries starting with a new letter of the alphabet, you can use \addtoindex and \endadd with a space of your choice:

```
>
buzzing |{003}
\addtoindex
\seealso{Bees}
\endadd
buzzing-noise |{003}
\addtoindex %<====
\medskip  %<====
\endadd    %<====
\indexit{Christopher Robin} |{001}
coming downstairs |{001}
coming downstairs,bumping |{001}
coming downstairs,stop bumping |{001}
coming downstairs,stop bumping,at the bottom |{002}
\addtoindex %<====
\medskip  %<====
\endadd    %<====
Edward Bear |{001\global\spcount =1}
\addtoindex %<====
\medskip  %<====
\endadd    %<====
oak-tree |{003}
oak-tree,large |{003}
oak-tree,large,foot |{004}
oak-tree,large,top |{003}
\addtoindex %<====
\medskip  %<====
\endadd    %<====
Winnie-the-Pooh |{002\global\spcount =2}
~
```

Buzzing, 3
   See also Bees
Buzzing-noise, 3

Christopher Robin, 1
Coming downstairs, 1
  bumping, 1
  stop bumping, 1
    at the bottom, 2

Edward Bear, <u>1</u>

Oak-tree, 3
  large, 3
    foot, 4
    top, 3

Winnie-the-Pooh, **2**

Author and Topic Indices

Some authors would like to have both a topic and author index. This can be done by using a variation on the indexing macros described on the previous pages.

To enter author index commands, use the commands `\anx{Author Name}` which is also printed in the text (equivalent to `\inx{...}`), or `\anxx{Author Name}`, for a 'silent entry' which will not be printed in the text but the author name and current page number will be sent to the `filename.aut` file, with `filename` being the same as the name of the LATEX file that you are working on.

Remember to use `\,` instead of a normal comma to produce a comma in the author index. `\anxx{Dillon\, Matt}` will produce "Dillon, Matt" in the index; `\anxx{Dillon, Matt}` will produce "Dillon," with "Matt" on the next line.

When you enter `\anx{Author Name}` or `\anxx{Author Name}` commands, you will find that there is a filename.aut formed when you run LATEX on your file. The `filename.aut` file is equivalent to the filename.inx that was discussed earlier, except it will have author names instead of subject matter as the items in the index.

The topic index will be formed the same as the kluwerindex discussed above, from `\inx{index entry}` and `\inxx{index entry}` commands which will be sent to an .inx file when you run LATEX on your file.

How to sort the .aut and .inx files

You must sort the filename.aut file to make a filename.att for the author index, and sort the filename.inx file to make a filename.srt file for the topic index.

The UNIX command is `sort -f filename.aut > filename.att`, and
`sort -f filename.inx > filename.srt`.

The MS-DOS command is `sort filename.aut > filename.att`, and
`sort filename.inx > filename.srt`.
If you are using another system, you must find the sorting command for that system.

! Make sure that the .srt and .att files start with > and end with ˜. (Some sorting routines do not produce these results)

Printing the Author and Topic Index

Once you have a filename.att and a filename.srt file available, these commands will allow you to print the author and topic index:

```
\printauthorindex
\printtopicindex
```

The topic index may be printed first by reversing the order in which you use these commands.

Using the Kluwer Proceedings Style with Scientific Word/Workplace

EVALUATION OF SWP

Scientific Word/Workplace is a program that makes writing a LaTeX document easy, even if the author knows nothing about TeX or LaTeX. (Scientific Word and Scientific Workplace differ only in that the Maple Math software is included in Scientific Workplace. We will refer to both programs with the abbreviation 'SWP'.)

SWP is essentially a word and math processor in which the author enters text and clickable tags and the program compiles and produces a valid LaTeX file. This means that the author can be almost completely ignorant of TeX commands and syntax and yet produce a perfectly acceptable .tex file.

In addition there are a number of other features that make this package attractive to authors: ScientificWorkplace includes the Maple math software so that within one's document calculations may be done and mathematical graphs may be constructed that will be printable in the final LaTeX document.

There is downtime necessary to get accustomed to the software and some set-up time needed to get SWP to work with the Kluwer kapproc.cls file, but some authors may feel that this is more than compensated for by ease of use of the program and ease of entry of mathematical symbols and notation. For those authors who want to use kapproc.cls with SWP, the following information is necessary.

GETTING KAPPROC.CLS TO WORK WITH SWP

Here are the names of the files that are necessary to use when formatting your book with SWP using the kapproc files.

```
Concise explanation of how to use kapproc.cls with SWP
    kapproc.swp

Basic kapproc macro file, identical to that used outside of SWP.
    kapproc.cls

Shell files used by SWP:
    procdocs.shl
    procsamp.shl
    procbook.shl

SWP compatible versions of the procsamp.tex and procdocs.tex files:
    procsamp.sav
    procdocs.sav
```

Step 1:

Drop these files into appropriate directories:

```
Drop these files into directory \swp40\shells\books
   procdocs.shl
   procsamp.shl
   procbook.shl

Drop these files directory \swp40\tcitex\tex\latex\tci
   kapproc.cls
   procsamp.sav
   procdocs.sav
```

Step 2: Setting Defaults in SWP

Start Scientific Workplace, then

```
In the File menu, click New
When the New window pops up,
   under Shell Directories: highlight Books
   under Shell Files: highlight procbook
   Click OK

In the Tools menu, click User Setup
   under Start-up Document
        under Shell Directories: highlight Books
        under Shell Files: highlight procbook
   Click OK

   under Files
        near bottom of window you will see 'Default Document Types'
           In the Open Type: bring up-- LaTeX(*.tex)
           In the Save As Type: bring up-- Portable LaTeX(*.tex)
   Click OK
```

Step 3: Viewing and/or Printing Sample Pages

To see kapproc sample pages followed by verbatim marked up text that produced the pages, showing the commands that were needed:

```
Under File, select New

   When the New window pops up,
     under Shell Directories: highlight Books
     under Shell Files: highlight procsamp
   Click OK

Either:
Click the third button from the far right of the menu to Typeset
this document to print the sample pages

or,
Click the second button from the far right of the menu to Preview
this document to view the sample pages
```

Step 4: Viewing and/or Printing kapproc Documentation

To see Kluwer Documentation for Proceedings done with the kapproc.cls style:

```
Under File, select New

   When the New window pops up,
     under Shell Directories: highlight Books
     under Shell Files: highlight procdocs
   Click OK

Either:
Click the third button from the far right of the menu to Typeset
this document to print the documentation.

or,
Click the second button from the far right of the menu to Preview
this document to view the documentation.
```

Notes on Documentation

You will see references in the documentation to both font issues and the use of the template file. Neither of these comments applies to your document in SWP. You can see the commands you need to enter by looking at the Preview or typeset version of procsamp, as noted above. You will have to enter these commands without the help of a template file. Font issues are discussed below.

STARTING YOUR BOOK

To start your document,

```
In the File menu, click New
When the New window pops up,
    under Shell Directories: highlight Books
    under Shell Files: highlight procbook
    Click OK

Use 'Save as' under the File menu, to give this file the name you want.
```

ENTERING TEX COMMANDS

Although you can pick many commands from the Tag menu and thus don't have to type them in, there are some commands that are included in the kapproc.cls file that are not found on that menu. In addition there may be other circumstances in which you would like to enter a LaTeX command, i.e., \setcounter{page}{<number>}.

In SWP, you are not allowed to simply type LaTeX commands into your file. However, you can highlight the Insert menu, go down to the bottom of it, highlight 'fields' and then go to 'TeX'. A screen will pop up, into which you can write any LaTeX command that you'd like to have in your file. Click on 'ok' and the screen will disappear leaving a grey box on the screen saying 'TeX field'. When you run 'preview' from the file menu, whatever was in the 'TeX field' will be expanded and will appear in your file.

FONTS

If you follow the directions above, your book will be typeset using ComputerModern fonts.

If you would like to use PostScript fonts, which will give your book a somewhat more finished appearance, you should run LaTeX your files using LaTeX outside of ScientificWord/Workplace. Fortunately, when using SWP, you can save your files in a form that will be understood by any standard LaTeX system.

To rerun your file produced with SWP, you need to do two things:

- Edit the procps.sty file to have it match the names of the PS fonts for Times, Helvetica, and Courier on the system that you are using.
- You will find the .tex file you have produced while working with SWP in the \swp40\docs directory. Edit this file to add the line \usepackage{procps}:

```
\documentclass{kapproc}
\usepackage{procps}
```

This file is then ready to run with LaTeX outside of SWP in order to produce your book with PS fonts.

Final Book Production: Table of Contents

You can determine how many levels of section heads you would like to appear in the table of contents by using the \setcounter{tocdepth}{<number>} command. The numbers indicate: 0= chapter titles, 1= section titles, 2= subsection titles, 3= subsubsection titles, will be included.

You may make Table of Contents using the normal LaTeX command, \tableofcontents, but there is another command that you may also use, \sptableofcontents.

The difference between the two commands is that \tableofcontents will have the page number of roman numeral five 'v'.

\sptableofcontents will start on an odd page but the page number that it starts on is not pre-set. This allows extra material to be placed before the Table of Contents and to have the TOC numbered appropriately.

Changing fonts for Table of Contents   If you would like to change the size of fonts used in the Table of Contents, you can change the size of the fonts in procps.sty if you are using \usepackage{procps}. If you are not using procps, you can change the size of the fonts in kapproc.cls (or kapproc.sty if you are using LaTeX2.09). In either case, you should search for these font declarations, and change them to suit your needs.

```
%% Table of Contents
  \font\toctitlefont=\helveticamedium at 16pt % Title of Table of Contents
  \font\tocarticletitlefont=\helvetica at 10pt %
  \font\tocauthorfont=\timesitalic at9pt %
```

Advice to Book Editor

Just a word of caution: Several authors may have inadvertantly chosen the same citation name. If this occurs, you will have to edit one of the authors' file and change the offending bibitem entries, so that each bibitem name is unique to the complete book.

Enjoy!