PREPARING A PAPER FOR
"EAS PUBLICATIONS SERIES"

P. Lefoin

1 Introduction

This short note describes the eas \LaTeX class for authors preparing a compuscript to be used in these proceedings. In itself it is an example of the use of the eas class. It is assumed that authors have some experience with \LaTeX; if not, they are kindly referred to ?, ?, ?, and to ?, ? for plain \TeX. Apart from its few high-level structuring commands, standard \TeX\-commands will work normally (\section{...}, \subsection{...}, \begin{...} ... \end{...}, etc.).

2 About the "head" of your paper

Your paper contains essentially two parts: the preamble, where you put your personal macros, between the \documentclass and the \begin{document} commands, and its body, which is where you put its contents. The body is in turn made of two parts: the top matter and the text. The top matter is where you give the initial data of your paper (the date, your name, the abstract, etc.).

\[
\left\{
\begin{array}{c}
\text{Preamble} \\
\text{Body} \left\{ \begin{array}{c}
\text{Top matter} \\
\text{Text}
\end{array} \right. \\
\end{array}
\right.
\]

Your paper should begin with its preamble:

\begin{verbatim}
\documentclass[eas]
\{ your macros \}
\end{verbatim}

Authors express their thanks here.

1 Institute of Advanced Physics, New-York and Département de Physique, Université de Ludoc, France
This is followed by its body:
\begin{document}
\title{your title}
\author{name of the first author}
\address{his/her address}
\abstract{the abstract}
\maketitle
your text and your references
\section{⋯}
\section{⋯}
\section{Appendix}
\section{⋯}
\begin{thebibliography}{⋯}
\end{thebibliography}
\end{document}

2.1 Your private macros (the preamble)

Your private definitions must be placed between the \documentclass and the \begin{document} commands (the preamble), and at no other place. The use of the commands
\newcommand, \renewcommand, \newenvironment, \renewenvironment
must be the object of an extreme care.

Sensible, restricted usage of private definitions is thoroughly encouraged. Large macro packages should be avoided when they are not used but for very few macros that can be isolated. Pasting macros borrowed from everywhere without needing them must certainly be avoided. Do not change existing environments commands or any part of standard \LaTeX. Never use macros that are mere abbreviations (v.g. \bt to replace \begin{table}) but use the facilities of your editor to minimize keystrokes. Intelligible comments of your macros are appreciated and may be useful.

2.2 The top matter

The top matter consists of the information obtained from the
\title, \author, \address, \runningtitle
commands. All these commands must come before the \maketitle command, which indicates the end of the top matter.

1. Title. The title of your paper is given with the \title command. The running head of odd pages is of the form

Author(s): Title
It often happens that this is too long, and for this reason, you may use the \runningtitle command, as in

\runningtitle{Dupond et al.: Black holes \dots}

which will produce

Dupond et al.: Black holes ...

as the running head of odd pages.

Regarding running heads, the editor (1) may decide to redefine the (odd-page) running head, and (2) will set the even-page running head.

Remark: In addition to the latin abbreviation \etal, eas provides the following abbreviations: \cf, \ie, \etc, \apriori, \afortiori, \loccit, \vg the meanings of which should be evident.

2. Authors and addresses. In most cases, there is only one author but occasionally there may be several authors.

– Several authors for one address. It frequently happens that two or more authors come from the same institution; their addresses are the same (except for their e-mail). In this case, use the \sameaddress command; its use is described in an example with the \secondaddress command below.

– Two addresses for one author. Some authors have two academic addresses; in this case, they may use the \secondaddress command. The uses of \sameaddress and \secondaddress are better explained with an example:

\author{Author One}
\address{Department of Theoretical Physics, University of ...; \email{author.one@... \& author.three@...}}
\secondaddress{The Royal Academy of ...}
\author{Author Two}
\address{Institute for Fundamental ...; \email{author.two@...}}
\author{Author Three}
\sameaddress{1}

Observe that: (1) \address and \secondaddress have an argument which is an address; like the \address command, \secondaddress produces numeral superscripts $^1$, $^2$, etc. referring to footnotes; (2) the argument of the \sameaddress command is an integer; it is the responsibility of the authors to give it its right value upon typesetting the document.

3. abstract. Authors should write an abstract, using \abstract{ ... }. If you don’t have an abstract, write the empty \abstract{} command.

4. Others. The \thanks command is optional; their uses are summarized by

\title{Measuring ...}\thanks{The P.T. Smith Laboratory}
3 About the body of your paper

Finish the top matter with the \texttt{\textbackslash maketitle} command.

3.1 Cross references

Authors should use the \texttt{\textbackslash label}, \texttt{\textbackslash ref}, \texttt{\textbackslash cite}... commands. Every numbered part to which one wants to refer to should be labeled with a \texttt{\textbackslash label{...}}.

3.2 References

There are two ways to produce literature references: either using the environment \texttt{\textbackslash thebibliography} or using \texttt{\textbackslash TeX} (see Lamport 1994; Carlisle 1995).

- Using \texttt{\textbackslash TeX}. The use of \texttt{\textbackslash TeX} is wide spread. We suggest the \texttt{astron.bst} \texttt{\textbackslash TeX} style. Using it you will generate your references in the exact format automatically via \texttt{\textbackslash TeX} from your bibliographic database. This file is available from the \texttt{ftp://ftp.loria.fr/pub/ctan/biblio/bibtex/contrib/astron/} directory (or other CTAN sites).

- References made without \texttt{\textbackslash TeX}. If you cannot use \texttt{\textbackslash TeX} see the Appendix B on the journal names abbreviations and the examples below.

3.3 Citations in the text

References are normally cited in the text by placing the name(s) and the year, without any comma between them, in parentheses. If there are two authors for one citation, both names should be given, separated by an ampersand (&). If there are more than two authors, only the first name should be given, followed by “et al.”. Commas should be used only to separate two or more years linked with one author (author group). If two or more citations are made in one set of parentheses, they should be separated by a semi-colon. If citations are made within the normal running text, only the year(s) should be placed in parentheses.

The following examples illustrate the required style:

(Sauvage & Thuan 1994), (Helou 1985)
(Beichman \textit{et al.} 1986; Moshir \textit{et al.} 1992)

Recently Beichman \textit{et al.} (1987, 1988) showed that ...

(Sauvage \& Thuan \texttt{\textbackslash cite{Sauv1994}}), (Helou \texttt{\textbackslash cite{Hel1985}})
(Beichman \texttt{\textit{\textbackslash cite{Beich1987}}}; Moshir \texttt{\textit{\textbackslash cite{Moshir1992}}})
Recently Beichman \texttt{\textit{\textbackslash cite{Beich1987}}, \texttt{\textbackslash cite{Beich1988}}} showed that $\ldots$

3.4 The reference list

The reference list should contain all the references cited in the text, ordered alphabetically by surname (with initials following). If there are several references to
the same first author, they should be entered according to the following scheme:

\begin{thebibliography}{} % (do not forget {})
\bibitem[1989]{Alla1989} Allamandola, L.J., Tielens, A.G.G.M.,
Chester, T.C. 1988, editors, \textit{‘\textit{IRAS Catalogs and
\bibitem[1999]{Cesar1999} Césarsky, D., Lequeux, J., Pagani,
\bibitem[1985]{hel1985} Helou, G. 1985, in \textit{‘\textit{Star-Forming Dwarf Galaxies and
Related Objects’}}, ed. D. Kunth, T.X. Thuan \& J.T.T. Van (Editions
Frontieres: Gif-sur-Yvette), p. 319
\end{thebibliography}

\appendix

\section{Including postscript files}

There are several packages used to include postscript files. Authors are kindly
asked to use the \texttt{graphicx} package by C.D.P. Carlisle and S.P.Q. Rahtz. This
package is available from the
\url{ftp://ftp.loria.fr/pub/ctan/macros/latex-required/graphics}
directory (or other CTAN sites).

First, your preamble must contain the line \texttt{\usepackage{graphicx}. Let us
suppose that you have an \texttt{eps} file called \texttt{circl.eps}.

\begin{figure}
\includegraphics[width=2cm]\texttt{circl.eps}
\includegraphics[width=2cm,angle=39]\texttt{circl.eps}
\caption{To illustrate the use of the graphicx package}
\end{figure}

Fig. 1. To illustrate the use of the graphicx package
B  Simplified abbreviations of journals

AJ  Astronomical Journal (the)
ARAA  Annual Review of
      Astronomy and Astrophysics
AZh  Astronomiceskij Zhurnal
A&A  Astronomy and Astrophysics
      (Letters indicated by number)
A&AR  Astronomy and Astrophysics Review (the)
A&AS  Astronomy and Astrophysics
      Supplement Series
Afz  Astrophisica
      (Letters indicated by number)
Ap&SS  Astrophysical Journal Supplement Series (the)
ApJS  Astrophysics and Space Science
Ark. Astron.  Arkiv for Astronomi
Astron. Nachr.  Astronomische Nachrichten
      Astrophys. Suppl.  Astrophysics Supplement
BAAS  Bulletin of the American Astronomical Society
Chin. Astron.  Chinese Astronomy
IAU Circ.  International Astronomical Union, Circular
Icarus  Icarus
      Canada
JA&A  Journal of Astronomy and Astrophysics
MNRAS  Monthly Notices of the Royal Astronomical
      Society
Mitt. Astron. Ges.  Mitteilungen der Astronomischen Gesellschaft
Mon. Notes  Monthly Notes of the Astronomical Society
      of Southern Africa
Nat  Nature
Observatory  Observatory (the)
PASJ  Publications of the Astronomical Society
      of Japan
PASP  Publications of the Astronomical Society
      of the Pacific
<table>
<thead>
<tr>
<th>Journals</th>
<th>Abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASPC</td>
<td>Ditto, Conference Proceedings</td>
</tr>
<tr>
<td>Phil. Trans. R. Soc. London,</td>
<td>Philosophical Transactions of the</td>
</tr>
<tr>
<td>Ser. A</td>
<td>Royal Society of London, Series A</td>
</tr>
<tr>
<td>QJRAS</td>
<td>Quarterly Journal of the Royal Astronomical Society</td>
</tr>
<tr>
<td>Sci</td>
<td>Science</td>
</tr>
<tr>
<td>Sci. Am.</td>
<td>Scientific American</td>
</tr>
<tr>
<td>Sky Telesc.</td>
<td>Sky and Telescope</td>
</tr>
<tr>
<td>Space Sci. Rev.</td>
<td>Space Science Reviews</td>
</tr>
<tr>
<td>SvA</td>
<td>Soviet Astronomy</td>
</tr>
</tbody>
</table>

There are commands for many of the most frequently-referenced journals so that authors may use the markup rather than having to look up a particular journal’s abbreviation.
\aj  Astronomical Journal
\araa  Annual Review of Astron and Astrophys
\apj  Astrophysical Journal
\apjl  Astrophysical Journal, Letters
\apjs  Astrophysical Journal, Supplement
\ao  Applied Optics
\apss  Astrophysics and Space Science
\aap  Astronomy and Astrophysics
\aapr  Astronomy and Astrophysics Reviews
\aaps  Astronomy and Astrophysics, Supplement
\azh  Astronomicheskii Zhurnal
\baas  Bulletin of the AAS
\jrasc  Journal of the RAS of Canada
\memras  Memoirs of the RAS
\mnras  Monthly Notices of the RAS
\pra  Physical Review A: General Physics
\prb  Physical Review B: Solid State
\prc  Physical Review C
\prd  Physical Review D
\pre  Physical Review E
\prl  Physical Review Letters
\pasp  Publications of the ASP
\pasj  Publications of the ASJ
\qjras  Quarterly Journal of the RAS
\skytel  Sky and Telescope
\solphys  Solar Physics
\sovast  Soviet Astronomy
\asr  Space Science Reviews
\zap  Zeitschrift fuer Astrophysik
\nat  Nature
\iaucirc IAU Circulars
\aplett Astrophysics Letters
\apspr Astrophysics Space Physics Research
\bain Bulletin Astronomical Institute of the Netherlands
\fcp Fundamental Cosmic Physics
\gca Geochimica Cosmochimica Acta
\grl Geophysics Research Letters
\jcp Journal of Chemical Physics
\jgr Journal of Geophysics Research
\jqsrt Journal of Quantitative Spectroscopy and Radiative Transfer
\memsai Mem. Societa Astronomica Italiana
\nphysa Nuclear Physics A
\physrep Physics Reports
\physscr Physica Scripta
\planss Planetary Space Science
\procsie Proceedings of the SPIE