A LaTeX-BASED FORMAT FOR THE PROCEEDINGS OF "THE UNIVERSE AS SEEN BY ISO" CONFERENCE*

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ABSTRACT

This file (isosample.ps) is an example and at the same time the instructions for the LaTeX macros to be used for preparing papers for the proceedings of the ISO Paris Conference. It should be used in conjunction with the style file iso98.sty which has been created to ensure uniformity of style in the final printed proceedings. Authors are requested to adhere to the instructions given here. If you experience difficulties using the macro, send an e-mail with a description of your problem to mkessler@iso.vilspa.esa.es, with 'macro' in the subject line.

Key words: ISO; infrared astronomy; macros; LaTeX.

1. INTRODUCTION

This LaTeX macro set is intended for preparing papers for the proceedings of the ISO Paris Conference[1]. It is derived in a fairly straightforward way from the plain LaTeX 'article style', and thus makes it possible to use all standard LaTeX facilities, such as tables and encapsulated postscript figures. These instructions are intended to assist you in preparing your paper in the format required by the editors. The postscript version of the file is intended to illustrate the layout of the paper, and to give general instructions on the conventions used in typesetting these proceedings. Please see the file `isosample.tex` for specific examples of how to implement the various LaTeX commands.

2. TYPESETTING THE TITLE SECTION

The title of the paper should be capitalised as shown. If the title extends over more than one line \\ can be used to break the line at an appropriate place.

Author names should be written as: initial of first name(s) followed by family name. All author names should be separated by a comma. Please do not put 'and' in the author list. If the author list spans more than one line, then the `\bf` command must be inserted in each line separately.

When the institute list contains more than one institute then each author/institute pair is linked with sequential numbers using the `$^number$` command. E-mail addresses should not be included in the affiliation; these will be listed separately, along with attendees and full institute addresses at the end of the proceedings.

Titles, author lists and institutes should not end with a punctuation mark. To include a footnote to the title use the `\thanks` command.

The abstract and keywords are created by enclosing the text within `\begin{abstract}` and `\end{abstract}`. Between the end of the abstract and the beginning of the keywords you should include a `\vspace {5pt} \\`. The keywords should be separated by a semi-colon, and end with a full stop.

3. SECTION COMMANDS

The standard LaTeX section commands `\section` and `\subsection` should be used, and will be numbered automatically. All the section headings should be given in capital letters, while only the first letter of the subsection headings should be capitalised (as shown in Section 3.1.). The `\label` command can be used in conjunction with `\ref` to tag sections, figures and tables. See the file `isosample.tex` for examples of how to use these commands.

3.1. Example Subsection

This shows an example of a subsection.

*ISO is an ESA project with instruments funded by ESA Member States (especially the PI countries: France, Germany, the Netherlands and the United Kingdom) and with the participation of ISAS and NASA.

[1]These instructions are based on those prepared for the 1997 Hipparcos Symposium in Venice by K. O'Flaherty, F. Favata and M.A.C. Perryman.

Figure 1. A sample figure, illustrating the possibility of importing encapsulated postscript figures. The figure caption should be placed in italics. This figure spans two columns and used the figure command.*

4. HOW TO PLACE FIGURES AND TABLES

LaTeX provides facilities for inserting and referencing both tables and figures within the text. In the following examples, figure and table numbers are assigned automatically (and sequentially).

4.1. Figures

Figures should be inserted in the text using the standard LaTeX figure environment, as in the following example.

```
 \begin{figure}[h]
   \begin{center}
   \leavevmode
   \centerline{\epsfig{file=samplefig1.eps,
               width=8.0cm}}
%  \vspace{8cm}
   \end{center}
 \caption{\em A sample figure, illustrating the
  possibility of importing encapsulated
  postscript figures. The figure caption should
  be placed in italics.}
 \label{fig:sample1}
 \end{figure}
```

Figures coded in this manner will normally span one column (see Figure 2). They can be made to span the whole width of the page by using the `\begin{figure*}` and `\end{figure*}` form, see Figure 1. In all cases please ensure that captions are set in italics (i.e. using the `\em` command).

You can control the placing of figures by using the optional argument to the figure environment, which can be: `h t b p` (for here, top, bottom or page), to indicate placement in the page or, in the last case, on a separate page at the end of the paper. Sometimes it is necessary to force LaTeX to position the figure where you want it (instead of the default position). To do this use `!` in the figure options, e.g. `[!ht]` will place the figure at the top of this page (without the `!`, LaTeX positions the figure at the end of the paper). Generally, both .eps and .ps files can be included, as long as a bounding box definition is given in the corresponding file.

These examples also show the usage of encapsulated postscript figures. If you just want to leave a blank space for later insertion of a hardcopy figure, replace the `\epsfig` statement by a `\vspace` statement. For more sophisticated use of the `\epsfig` command we refer the reader to the documentation of the `\epsfig` macro set.

Figure 2. A sample figure, illustrating the possibility of importing encapsulated postscript figures. The figure caption should be placed in italics.

4.2. Table Material

Tabular material should be inserted using the LaTeX table environment (`\begin{table}` and `\end{table}`) or the table* variant for tables spanning two columns. This is similar to the figure environment described in Section 4.1. Again, placement of the table can be controlled through the usage of the optional arguments: `h t b p`. Note that the table captions appear above the table (as in Table 1), whereas the figure captions appear below the figures.

Table 1. A sample table illustrating usage of the LaTeX table environment. Please try to use the smaller font size for the table, as in the current example (set by the `footnotesize` *command).*

First column	Col. 2	Col. 3	V mag
row 1	11.0	25.0	12
row 2	11.0	25.0	12
row 3	11.0	25.0	12
row 4	11.0	25.0	12
row 5	11.0	25.0	12

5. EQUATIONS

Formulae which appear in the running text should be enclosed in `$` signs. For example, to produce the equation $a^2 + b^2 = c^2$ within a paragraph type `$a^2 + b^2 = c^2$`. Displayed formulae are produced using the `\begin{equation}` and `\end{equation}` commands (see Equation 1). This produces equations which are automatically numbered sequentially throughout your paper. Equations which should appear together can be formatted using `\begin{eqnarray}` and `\end{eqnarray}` as for Equations 2 and 3:

$$\Delta\hat{a}_i = \sum_j \frac{\partial f_i}{\partial a_j}\Delta a_j \qquad (1)$$

$$\begin{aligned} \alpha &= \alpha_0 + (T - T_0)\,\mu_{\alpha *0}\sec\delta_0 \qquad (2)\\ \delta &= \delta_0 + (T - T_0)\,\mu_{\delta 0} \qquad (3)\end{aligned}$$

When in math mode (i.e. within the equation or eqnarray environment) all letters appear in italics. However, the preferred notation is for subscripts, superscripts[2] and text within the equation to be typeset as roman. To achieve this use the `{\rm }` command. Thus, `$T_{\rm eff}=5.8\times10^{3}$~K` produces $T_{\rm eff} = 5.8 \times 10^3$ K. Note that units should be tied to the numerical value using `~` and should always be in roman font (the default outside of math mode).

6. BIBLIOGRAPHIC REFERENCES

The last section of the paper should include the bibliography. The collection of bibliographic references should begin, as shown in this sample paper, with a `\begin{thebibliography}{}` command, and end with the `\end\{thebibliography}` command. Each bibliographic entry should be in the format shown in the example file; i.e. each entry should have a `\bibitem` entry, in the following format:

```
\bibitem[\protect
\astroncite{Allen}{1973}]{all73}
Allen, C., 1973, Astrophysical quantities,
Athlone Press

\bibitem[\protect
\astroncite{Nobody et~al.}{1997}]{nob88}
Nobody, B., Somebody, G., Who, M.E. et al.\ 1997,
ApJ, 331, 902

\bibitem[\protect
\astroncite{Smith \& Jones}{1996}]{sj96}
Smith, A., Jones, B., 1996, A\&A, 555, 999
```

The last entry in the bibitem entry (i.e. the `all73`, for example) allows for citations to be easily inserted in the text. For example, the `\cite{all73}` command will produce 'Allen 1973', while the `\cite*{all73}` form will produce 'Allen (1973)'. (If there are two authors then they should appear as e.g. Smith & Jones (1996), produced by `\cite*{sj96}`. More than two authors will appear as e.g. Nobody et al. 1997, produced by `\cite{nob88}`).

For the format of each bibliography entry, please follow the standard A&A format, a summary of which is available in the January 1 issue of each year. Note that when you first run LaTeX on your file, it may complain that some references were undefined. Simply LaTeX the file again and the cross-references should be reconciled.

7. FINE-TUNING AND CONVENTIONS

The following conventions should be adopted throughout your text:

- where possible, avoid using abbreviations, but if they are necessary they should be defined at their first occurrence;
- use arcsec, arcmin, instead of $''$ and $'$;
- when followed by a number, capitalise and do not abbreviate the following: Section, Figure, Equation;
- use per cent (`per~cent` instead of %);
- e.g. and i.e. are written as `e.g.\` and `i.e.\` in order to avoid the default spacing after '.';
- to produce the 'solar' symbol use `\odot` e.g. `$L_\odot$` produces $L_\odot$;
- for the unit 'μm' use `$\mu$m`;
- between a wavelength and the unit insert a 'thin space' using `\,` e.g. `15\,$\mu$m` produces 15 μm;

8. FINAL MANUSCRIPTS

8.1. Preparation of Final Manuscripts

There is an upper limit of eight pages for invited review papers and four pages for contributed (oral and poster) papers.

[2] except when the superscript or subscript are variables

You should use the standard LaTeX commands, in conjunction with the style file provided, iso98.sty, to produce the final output. If using dvips places the final PostScript file lower on the page than appears to be reasonable, try using the qualifier '-t a4' with dvips.

8.2. Submission of Final Manuscripts

Please use the following unique naming scheme for your contribution, namely: last name plus first initial, e.g. kesslerm.tex. Figures should be numbered similarly, namely kesslerm1.eps, kesslerm2.eps, etc. If you presented more than one paper, please use identifiers such as kesslerm1.tex, kesslerm2.tex, etc. In this case, the corresponding figures should be named as kesslerm1_1.eps, kesslerm1_2.eps, kesslerm2_1.eps, etc.

Remember to run LaTeX **twice** on the final file to get all references correct! Once your contribution has been prepared, the following files should be transferred to us:

- the LaTeX file, where the filename is constructed using the recipe above;
- the figures for your paper in encapsulated postscript or normal postscript format, where the filename(s) is (are) constructed using the recipe above;
- the postscript version of your paper.

The above files should be deposited in our ftp area:

```
ftp isoias.ias.fr
user: isoconf
password: the_universe

cd isoias3:[isoconf.ftp]

put *.tex
put *.eps
put *.ps

bye
```

Once you have successfully deposited all files, please let us know by sending an e-mail to: 'isoconf@ias.fr'.

There is a **strict deadline** of **30 November 1998** for the receipt of papers for inclusion in the proceedings. In order to make appropriate arrangements for the printing and timely distribution of the proceedings, the editors ask for your understanding in insisting that late papers will **not** be considered.

ACKNOWLEDGMENTS

The section containing acknowledgments should use the `\section*` form, as shown, to prevent it from being numbered.

REFERENCES

Allen, C. 1973, Astrophysical quantities, Athlone Press

Nobody, B., Somebody, G., Who, M.E. et al. 1997, ApJ, 331, 902

Smith, A., Jones, B. 1996, A&A, 555, 999