THE LATEX FORMAT FOR THE PROCEEDINGS OF 'THE PROMISE OF FIRST'

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Abstract

This file **toledoSample.tex** contains the instructions for authors preparing papers for the proceedings of the 'The Promise of FIRST' symposium. It should also be used as the starting point for writing the papers. In order to compile this \LaTeX file you need the document class **toledoStyle.cls**, as well as the \LaTeX 2 ϵ package. Note that it will not work properly with the old \LaTeX 2.09!

Key words: Galaxies: formation – Stars: formation – Missions: FIRST – macros: L⁴TEX

1. Introduction

These instructions are intended to assist you in preparing your paper for the proceedings of the 'The Promise of FIRST' symposium 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 toledoSample.tex for specific examples of how to implement the various IATEX commands, and use this file as the starting point for writing your own paper for the proceedings.

The **toledoStyle.cls** LATEX document class is intended for preparing papers for the proceedings of *'The Promise of FIRST'* Symposium. It makes it possible to use all standard LATEX facilities, such as tables and encapsulated postscript figures. Make sure that you have this file, you need it, and please *don't modify it*, we will use our version – not yours! – when creating the proceedings. Also please note that you will *need* the LATEX 2¢ package, you will not manage properly with the old LATEX 2.09 package. Should you still have the old LATEX 2.09 package installed in your institute you will want to upgrade for reasons other than 'just' writing your 'The Promise of FIRST' paper anyway. Talk to your system manager!

Once your paper is completed, and you are happy that LATEX produces your desired output, you should ftp the complete source (i.e. the .tex) file plus all the figures (i.e. all the .eps files) to us as described in the web-page.

2. The title section

Title, authors and affiliations should be specified as above, using the \title{}, \institute{} and \author{} commands, If multiple authors and/or institutes, then use the \and command to separate them. For authors use initial of first name(s) followed by family name. When the institute list contains more than one institute then each author/institute pair is linked with sequential numbers using the \inst{} command attached to each author name. Email 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. The abstract and keywords are created by enclosing the text within \begin{abstract} and \end{abstract}. Keywords should be inserted using the \keywords{} command; note that they will be used to create an index.

3. Section commands

The standard LATEX sectioning commands \section and \subsection should be used, and will be numbered automatically. In order to make listings use the itemize or enumerate commands, e.g.

- This is the first item in an itemized list
- And this is the second one. This list is itemized.
- 1. This is the first item in an enumerated list
- 2. And this is the second one. This list is enumerated.

3.1. Subsection example

This is an example of a subsection. Please do not try to modify the font and style of the section titles.

4. How to place figures and tables

This section describes how to insert figures and tables into the text. Figure 1 shows an example of a figure which spans one column only. For figures to span the whole width of the page, use the \begin{figure*} and \end{figure*} form

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 eps files can be included, as long as a bounding box definition is given in the corresponding file. We advise to use the \epsfig{} (or the \includegraphics{}) command to include postscript files; it is distributed with the standard LATEX 2e distribution, and comes with the relevant documentation. Note that only electronic figures will be accepted; if your figure only exists in hardcopy you will need to have it scanned.

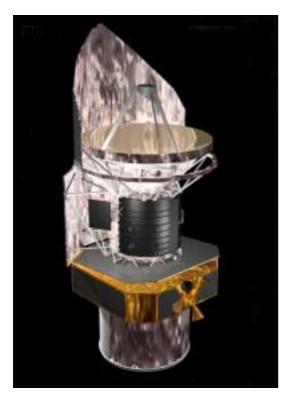


Figure 1. This is a colour figure. Submitted colour postscript figures will be printed in colour in the proceedings.

Colour figures will be printed in colour in the proceedings. Thus, use colour when it brings added value, but not when it detracts from the message that you want to convey!

Tabular material should be inserted using the standard LATEX table environment (\begin{table} and \end{table}) or the table* variant for tables spanning two columns. This is similar to the figure environment. 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. Again, please do not try to modify the caption's style.

In general, cross-referencing within the text is made easier if the LATEX \label{} and \ref{} commands are used, and we encourage authors to use them in their papers.

Table 1. A sample table illustrating usage of the LTEX table environment. Please try, if possible, 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 two commands begin{equation} and end{equation} (see Equation 1). This produces equations which are automatically numbered sequentially throughout your paper. Equations which should appear together as an array can be formatted using begin{eqnarray} and end{eqnarray} as for Equations 2 and 3:

$$\Delta \hat{a}_i = \sum_j \frac{\partial f_i}{\partial a_j} \Delta a_j \tag{1}$$

$$\alpha = \alpha_0 + (T - T_0) \,\mu_{\alpha * 0} \sec \delta_0 \tag{2}$$

$$\delta = \delta_0 + (T - T_0) \,\mu_{\delta 0} \tag{3}$$

When in math mode (i.e. within the equation or eqnarray environment) all letters appear in italics. However, subscripts, superscripts and text within the equation should be typeset as roman. To achieve this use the ${\rm m} \$ command. Thus, in order to produce $T_{\rm eff} = 5.8 \times 10^3 \$ K you have to write $T_{\rm m} = ff = 5.8 \times 10^3 \$ K. Note that the units should be tied to the numerical value using and should always be in roman font (the default outside of math mode).

6. Fine tuning

We advise the authors to read, for example, the documentation of the A&A LATEX style file, where details are

except when the superscript or subscript are variables.

supplied about the proper usage of, e.g., short and long dashes, spaces, etc. is given.

The definitions in the A&A IATEX style file are also available in the present style file, for some of these see Table 2 below.

Table 2. Some useful definitions (astronomy symbols)

\sun	\odot
\degr	0
\arcmin	′
\arcsec	11
\fd	$\stackrel{ m d}{\cdot}$ (fraction of day)
\fp	^p (fraction of period)
\fdg	° (fraction of degree)
\farcm	' (fraction of arcmin)
\farcs	" (fraction of arcsecond)
\fh	$\stackrel{ ext{h}}{\cdot}$ (fraction of hour)
\fm	^m (fraction of minutes)
\fs	$^{\mathrm{s}}$ (fraction of second)

7. Indexing

We will build an index for the proceedings volume; to help in the process, you should identify references to individual astronomical objects (for example, when talking about the star HD 283572 or the AGN NGC 4051), named according to the IAU conventions, through use of the \object{} command. This will insert its argument in the text normally, and at the same time will insert it (during the final processing stage) in an auxiliary file which will be used for the indexing process. Also, the keywords inserted in the abstract will be used in the same fashion.

8. 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. Observe the 'standard' order for bibliographic material: author name(s), publication year, journal name, volume, and page number for articles. 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}]{authorf:all73} Allen, C., 1973, Astrophysical quantities, Athlone Press

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

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

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

For the format of each bibliography entry (including journal abbreviations), 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 IATEX on your file, it may complain that some references were undefined. Simply IATEX the file again and the cross-references should be reconciled.

Acknowledgements

Acknowledgments can be included at the end by using the {\acknowledgments} environment. We are indeed grateful to all previous authors of LATEX template files with instructions, from whom we have copied a lot.

REFERENCES

Allen C. 1973, Astrophysical quantities, Athlone Press Goossens M., Mittelbach F., Samarin A., 1994, The Lamport, L. 1994, A Document Preparation System Syst

Lamport, L. 1994, A Document Preparation System LATEX.

Addison-Wesley

Nobody B., Somebody G., Who M.E. et al. 1997, ApJ 331, 902 Smith A., Jones B. 1996, A&A 555, 999

APPENDIX A: EXTRA ITEMS

If necessary, one or more appendices can be included. To do that, use the \appendix command, and then just use the normal sectioning commands afterwards; they will be numbered with roman letters rather than with sequential numbers.