

Astronomical Society of the Pacific Conference Series—Instructions for Editors Using L^AT_EX 2_ε Markup

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Abstract. This manual provides a step-by-step guide to copy-editing individual author manuscripts and assembling a volume of proceedings in the ASP Conference Series. To do a successful job you will need the editor’s instructions (this document), the author’s instructions (`aspauthor2006.tex`), and the graphicx guide (`usinggraphicx.tex`).

1. Before You Start to Edit

The aim of this manual is to help you to edit and compile your volume with the minimum of effort. That said, editing a book is a strenuous task and will demand a considerable portion of your time for at least a few months if the job is to be done properly. One important point to make right away is that you should plan the proceedings and choose the editors in the early stages of organizing the conference. Please see the ASPCS’s recommendations for preliminary planning under “Step 1, Getting Started” in the editor’s information available online at http://www.aspbooks.org/step1_getting_started/. Division of duties among editors is an especially important decision to make early.¹ If you are now at the stage where you are ready to start editing your volume, all of these requirements should have been fulfilled.

For the remainder of this guide, it is assumed that you now have all the articles in from the authors, together with written transcripts of discussion sessions (if any), and that you are now ready to start copy-editing the articles and assembling the volume.

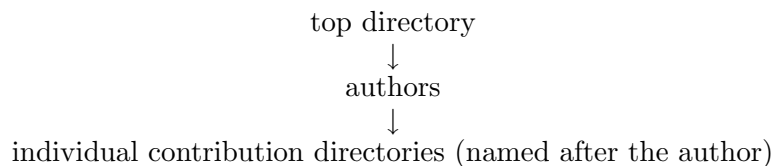
¹Although many proceedings are edited by a single person, it saves a lot of effort if two or three editors share the various tasks, for example, by giving one editor the job of copy-editing and another the scientific refereeing if refereeing is desired. Although many responsibilities can be shared by more than one person, it is wise not to have more than one copy-editor; otherwise it is very difficult to ensure uniformity of style and format throughout the volume.

2. Preparing the Articles for Inclusion in the Volume

Getting the individual articles ready for inclusion in the volume will constitute the greatest burden you will face as an editor.

2.1. Directory Structure

Your workload will be greatly lightened if you adopt the simplest possible directory structure. Once the volume is complete, you will need to upload the source files to the ASP and others may need to work with the files, so they must be structured in a simple, logical way that is easy for anyone to understand. The recommended structure is:



The book macros and style file would be in the top directory. Below this, the “authors” directory would contain a subdirectory for each contribution in the volume. The individual contribution directories would contain the author `.tex` and figure files. Please ensure that the pathname for articles and their figures are accessible to the ASP (i.e., no pathnames to home directories). So an acceptable pathname to a \LaTeX file called `allsky.tex` for a talk by Dan Murgatroyd might be `authors/murgatroyd_talk/allsky`; an unacceptable pathname would be one that referred the \LaTeX compiler to the editor’s home directory since ASPCS would not have access to such a directory. A further point to watch out for in author \LaTeX files is pathnames in the `figure` environment that route to some directory accessible only by the author.

2.2. Preparing the Author’s \LaTeX File

At a later stage in the editorial process (see §3.3) you will need to strip out a number of preamble commands from the authors’ files, but at the copy-editing stage it is better to work with the author files individually. That said, however, examine the file preamble carefully and verify that there are no author-defined macros or other extraneous matter in the preamble, which should contain nothing except the commands described in §3 of *Instructions for Authors Using $\text{\LaTeX} 2_{\epsilon}$ Markup* (hereafter, *Instructions for Authors*).

If you find that you have to delete any such author-defined commands in the preamble, check that the file compiles correctly; if it doesn’t then contact the author if necessary to get him to alter his file to conform with *Instructions for Authors*, which states categorically that such definitions are forbidden.

If, however, you find that the new definition is a useful one that is worth retaining, then leave it in situ while you are copy-editing and transfer it later to the book macro `aspvolume.tex` preamble. Before you do any such thing, however, convince yourself that the new macro name does not conflict with any standard \LaTeX macro, otherwise strange things will start to happen when you try to compile the volume in its entirety.

Also check to make sure the author has not changed other elements of `aspauthor2006.tex` or the style file. Don't allow authors to tamper with or use other variations of the templates and macros, including the basic style (margin widths, paragraph separations, etc.) which must be uniform throughout the book.

Over-margin errors account for a large number of corrections editors are asked to make. Margin problems can be caused by changes to the definitions in the preamble, placement of photos, figures or tables that are too large, words which L^AT_EX doesn't know how to hyphenate, or page numbers outside the margin because the running head is too long. Please print and check each paper for items that are over margin. A margin guide is available for your reference. All over-margin problems, whether on the sides or bottom of the page, are referred back to the editor. It is best to catch over-margin errors early, because they often change pagination and cause more work once the volume is compiled.

Editors may wish to check author files for potential printing problems at <http://dx.sheridan.com/on1/>. For more information on this resource, see <http://dx.sheridan.com/about/main.html>.

2.3. Copy-Editing Guides and Reference Works

This manual is not the place to seek detailed instruction on the art of copy-editing; however, there are a number of useful copy-editing guides and other reference works that you should invest in (all these volumes are reasonably priced). Which of these you choose will depend on whether you are copy-editing according to British practice (valid for the UK, the European Union, and all Commonwealth countries), or US standards.

American English Three essential works will probably meet all your editorial needs. All editors working according to US practices should have:

- *The Chicago Manual of Style*, 15th edn (Chicago and London: University of Chicago Press)
- *Merriam-Webster's Collegiate Dictionary*, 11th edn (Springfield: Merriam-Webster)
- W. Strunk, Jr., & E. B. White 2000, *The Elements of Style*, 4th edn (Boston: Allyn and Bacon)

The Chicago Manual of Style is far more than a guide to good style; it is nothing less than an exhaustive compendium of US publishing practice. *Merriam-Webster's Collegiate Dictionary* is widely used by American publishers to define their house styles and is an invaluable guide to word division (this last feature is useful even if you are editing in British English). Strunk & White is a compact, no-nonsense guide to clear writing.

British English If you are following British publishing norms, then you should have all of the following works at your side:

- *The Concise Oxford Dictionary*, 11th edn (Oxford: Clarendon Press)

- *The Oxford Dictionary for Writers & Editors*, 2nd edn (Oxford: Oxford University Press)
- *Hart's Rules for Compositors and Readers at the University Press, Oxford*, 40th edn (Oxford: Oxford University Press)
- Judith Butcher, *Copy-Editing: The Cambridge Handbook for Editors, Proofreaders and Copy-editors*, 4th edn (Cambridge: Cambridge University Press)

The Concise Oxford Dictionary is a sound choice for editors working in British English since it is widely used by academic publishers in the UK. *Hart's Rules* and *The Oxford Dictionary for Writers & Editors* are two extremely useful books to have at hand at all times. For British editorial practice, Judith Butcher's *Copy-Editing* is unequalled in its thoroughness and level-headedness; it is also probably the most widely recommended work on copy-editing.

2.4. Slugs, Running Heads, Titles, Author Names and Affiliations, and Abstracts

It is important that certain aspects of the articles in the volume, such as page format, conform to a common standard. The most important aspects of page format are the slug at the top left-hand corner of the opening page of an article, the running heads, the title, the author names and affiliations, the abstract, and the section heads. In this subsection we deal with the items in this list as far as author names and affiliations in separate subsections.

The first thing you should do is take a quick glance through the article to ensure that the author has not changed basic aspects of ASP page style and format (such as indenting the section heads, forcing a paragraph indentation in the first paragraph of a section, changing the page head and foot format). If you see any such delinquency, either return the article to the author and request that he follow *Instructions for Authors* more closely, or (possibly the quicker alternative) change the format back to the standard yourself.

Slugs At this stage, the slug should contain no relevant information concerning the volume. It is worth waiting until the end of the editorial process before keying in the volume details into the file `asp2006.sty` since you won't know the volume number until a week before you are ready to send the manuscript to ASP. So, for the time being, the slug should read simply:

```
**TITLE**
ASP Conference Series, Vol. **VOLUME**, **YEAR OF PUBLICATION**
*NAMES OF EDITORS**
```

The slug should appear at the top left corner of the first page of each paper. If the slug doesn't appear when you view the compiled file on your screen, then either you are not using the correct style file (`asp2006.sty`) or you have changed the page style command, which should read `\pagestyle{myheadings}`.

When you are within one week of sending the volume to the ASP, please send the Submission Form requesting a volume number to Enid Livingston

(aspcs@byu.edu) and the volume number will be sent to you to add to the slug. We do not issue volume numbers until you are within one week of sending the manuscript. If a volume is submitted after September 1, the volume will be published in the following calendar year.

Running Heads Running heads are the headings along the top of each page of the book. They act as signposts telling readers where they are (*Chicago*). Rigorous consistency of style in running heads will improve the presentation of the volume. The `\markboth{}{}` command in the preamble automatically places author name at the top of the left page and the article title at the top of the right page. The author surnames only should appear (no first names or initials). The recommended style is as follows:

- Use mixed case type for both running heads
- Capitalize significant words in the titles (nouns, pronouns, adjectives, verbs and adverbs, but not articles, prepositions, or conjunctions)
- One author: surname only
- Two authors: surnames separated by “and” (no ampersand)
- Three authors: surnames separated by serial commas, with “and” before last surname
- More than three authors: first author’s surname followed by “et al.” (note the stop in “al.”!)
- Running heads should be included on all papers, indexes and front matter that are longer than one page (e.g., Participants List and Author Index)

Some of the most common errors needing editor correction are long running heads, which cause the page number to appear outside the margin. The page number must line up with the text along the left or right margins, not extending further than the first full line of text. Make sure that running heads are not so long as to push the page number over the outer margin. If this should occur, then shorten the offending running head so that the page number fits inside the margin.

The Title The `\title{}` command ensures that the title is correctly formatted in boldface. Use mixed case, capitalizing the first word and all other significant words, except articles, prepositions and conjunctions. You may occasionally find it convenient to force a linebreak at a given point in a long title, say, to avoid a single word appearing on the last line of the title. Just insert `\\` where you would like the break to occur.

ASP style does not support the use of footnotes in titles since they are never needed. The most common use of title footnotes in astronomy seems to be to say something along the lines of “This study is based on observations carried out with the Enormously Huge Telescope, operated by institution to which we are affiliated.” This sort of statement rightfully belongs in the the part of the text describing the observations. Any other kind of statement can likewise be included somewhere in the body of the text or in the acknowledgements.

Author Names and Affiliations Ensure that the list of author names adheres to the following style guidelines:

1. Use mixed case type for author names.
2. Either initials or first names must precede the surname. See *Chicago* 8.5—8.20 for help with both English and non-English names.
3. Authors should be allowed to decide how their names appear on the paper for citation consistency.
4. In the case of more than two authors, all from the same institution, the names of the different authors should be separated by commas, the last name being preceded by “and” (not an ampersand).
5. If a superscript is attached to an author’s name, it should follow any separating comma, not precede it (for use of superscripts see *Instructions for Authors*).
6. If the authors are from different institutions, list them institution by institution (unless an author has more than one affiliation, in which case see *Instructions for Authors*).
7. If some of the authors have multiple affiliations, it is convenient to use superscripts and list the affiliations in numerical order either immediately below the author list or in footnotes, using the command `\altaffilmark{}`.

Examples demonstrating these rules and the use of footnote affiliations are provided in the *Instructions for Authors*.

2.5. Sections, Subsections, and Subsubsections

The `asp2006.sty` style file permits three levels of sectioning, the lowest of these being unnumbered.² A thumb through a random sample of ASP volumes will demonstrate that this is nearly always a sufficient level of complexity, especially given that contributions to conference proceedings tend to be fairly short (1–12 pages is the norm). Check that authors haven’t tried to tamper with the sectioning format. If they have, it will be necessary to remove any homemade definitions and reinstate the `\section{}`, `\subsection{}`, and `\subsubsection{}` commands.

Use mixed case type for section head, with the same capitalization criteria as for the main title.

²We have recently decided to modify the ASPCS format to allow subsubsections to be numbered if required. However, this change will not be implemented until the next revision of the ASPCS macros and ASPCS cannot provide support for any changes to section formatting until the new macros are ready (which will probably be in mid-2007 at the earliest).

2.6. Indexing

A full discussion of indexing is given in §4. Traditionally, publishers have always recommended that indexing be tackled right at the end of the editorial process once the main text is finalized. With the automatic index compilation facilities offered by L^AT_EX, however, the page numbering is adjusted automatically when changes are made to the main text. This means that indexes can evolve in tandem with the editing of the articles. In other words, articles can be indexed one by one. A further useful facility offered by L^AT_EX is the possibility of printing the indexed words in the margin of the page on which they occur. Once the indexing is finalized, this margin printing facility can then be switched off so that the margins are cleared ready for printing (see §4 for a full discussion of this facility).

2.7. Tables and Figures

Please refer to §§3.5—3.6 of *Instructions for Authors* for a detailed guide on how to prepare tables and figures. Your job as editor will be to ensure the following:

- *Tables:*
 - No tables referred to in the text are missing
 - The tables are useful or might be better transformed into a graph
 - The tables are correctly referred to in the text
 - There are no tables not referred to in the text
 - There are no vertical rules (unless these are absolutely essential—they rarely are)
 - The table formats recommended in §3.5 of *Instructions for Authors* have been adhered to
 - Tables are not over margin
- *Figures:*
 - No figures referred to in the text are missing
 - The figures contribute to the discussion in the text
 - The figures are correctly called in the text
 - There are no figures not referred to in the text
 - (In the case of graphs) axes are labeled correctly and are not upside down
 - All lettering and necessary detail are clearly discernible (remember that the manuscript will be reduced by 10% by the printer)
 - Hairlines are not used and contour lines are not so tight that they will run together with a 10% reduction
 - Halftones (black and white photographs) are of good resolution and contrast (minimum 266 dpi)
 - Figures are described in black and white and are adapted for black and white printing unless paying for color images in the printed version.

- Graphs are computer-generated, not just scanned, in encapsulated PostScript format rather than bitmaps
- Figures, including axis labels, are not over margin
- The figures do not cover any text, including captions and running heads (must be checked in the .pdf file)
- The figure does not include any unwanted background (gray haze, lines, dots, writing) in or around the figure
- The figure is centered and aesthetically pleasing
- Permission has been requested and received to use all proprietary images and figures in the book and proper credit has been given in the caption or acknowledgements

Information about color images is provided in the *Instructions for Authors* §3.6. Unless other arrangements have been made, all images will be printed in black and white; although images provided in color will appear in color on the website, www.aspbooks.org. Color images may be printed in color at a cost of \$975.00 for the first image in the volume and \$500.00 for each additional image. Editors may collect money for color reproductions and pay all at once, or they may provide the ASP with a list of authors to be billed for individual color images. If an author fails to pay, the editor will be responsible for payment.

The question of figures is dealt with exhaustively in *Instructions for Authors* §3.6 and you should have this document at hand when dealing with figures.

2.8. Acknowledgements

Make sure that the author has used the `\acknowledgements` command for this component of the article to ensure the correct format. Any references to telescopes, instrumentation, and public-domain software should be transferred to the relevant part of the main text. Acknowledgements should be used for thanking institutions, groups, and individuals that have directly contributed to the work (e.g., privileged access to privately written code).

2.9. Referencing and Bibliography

While it is the author's responsibility to see that the references are quoted accurately, the conscientious editor will insist on checking that a) the works cited are listed in the bibliography, b) there are no entries in the bibliography that are not cited in the text, c) the citations and bibliography entries are correctly formatted, and d) the bibliographical information is complete. Where books are cited, it is necessary to provide an edition number (if the first edition is not referred to), the publisher, and the place of publication. In the case of conference proceedings, the edition number will be irrelevant since proceedings never (at least in astronomy) run into a second edition, but full publishing details are still required, as well as the surnames and initials of the editors.

To avoid cross-referencing mistakes and ensure total referencing consistency, it is a good idea to make full use of the `thebibliography` environment (see *Instructions for Authors* for a full description of `thebibliography`). Formatting in the `bibliography` environment must be rigorously checked to avoid loss of bibliographic formatting throughout the rest of the volume.

If you experience problems with references, do the following things:

- Ensure the `\bibitem` entries are complete with information appearing in both the brackets and braces (e.g., no entries should be as follows: `\bibitem[]{ }Author, I. 2000, ApJ, 123, 456`);
- If two papers use a common short form reference in the curly braces, customize it for each paper (e.g., two separate papers referring to `{moos2000}` could be changed to `{author1_moos2000}` and `{author2_moos2000}` according to each author's last name or initials; and
- Make certain that the year is enclosed in parentheses within the square brackets (e.g., `[Moos et al.(2000)]`).

2.10. Discussions

The `asp2006.sty` style file creates a discussion session (to be placed right at the end of the article, *after* the bibliography) the first time you use the `\question{}` command. Answers are supplied using the `\answer{}` command. Here is an example of a discussion session:

Discussion

Barth: Nearly all of the points at the upper end of the $M_{\text{BH}}-\sigma$ correlation come from gas dynamics. Are you concerned that there might be systematic offsets between gas-dynamic and stellar-dynamic measurements?

Merritt: This is possible. Actually, two of the galaxies with the highest black-hole masses—NGC 4342 and NGC 3115—have M_{BH} derived from stellar kinematics. As I have emphasized in my talk, the danger of large systematic errors in M_{BH} is probably greatest with stellar kinematical data.

Hüttemeister: If BHs do not quickly merge, but galaxies form by multiple mergers, one might expect many/most BHs to be ejected. Would this be consistent with preserving the $M_{\text{BH}}-\sigma$ through hierarchical galaxy formation? Or can this binary scenario be ruled out/constrained by the $M_{\text{BH}}-\sigma$ relation?

Merritt: I don't think we know enough about the $M_{\text{BH}}-\sigma$ relation to answer this question. If a significant fraction of supermassive black holes are ejected from galaxy nuclei, this will change the mean ratio, $M_{\text{BH}}/M_{\text{galaxy}}$, implying a discrepancy with the black-hole mass density inferred from integrated quasar light. The current uncertainty in both quantities is consistent with $\sim 1/2$ of all black holes having been ejected from nuclei.

This session is generated by the following code:

`\question{Barth}` Nearly all of the points at the upper end of the $M_{\text{BH}}-\sigma$ correlation come from gas dynamics. Are you concerned that there might be systematic offsets between gas-dynamic and stellar-dynamic measurements? `\answer{Merritt}` This is possible. Actually, two of the galaxies with the highest black-hole masses---NGC 4342 and NGC 3115---have M_{BH} derived from stellar kinematics.

As I have emphasized in my talk, the danger of large systematic errors in M_{BH} is probably greatest with stellar kinematical data.

`\question{H"uttemeister}` If BHs do not quickly merge, but galaxies form by multiple mergers, one might expect many/most BHs to be ejected. Would this be consistent with preserving the $M_{\text{BH}}-\sigma$ through hierarchical galaxy formation? Or can this binary scenario be ruled out/constrained by the $M_{\text{BH}}-\sigma$ relation? `\answer{Merritt}` I don't think we know enough about the $M_{\text{BH}}-\sigma$ relation to answer this question. If a significant fraction of supermassive black holes are ejected from galaxy nuclei, this will change the mean ratio, $M_{\text{BH}}/M_{\text{galaxy}}$, implying a discrepancy with the black-hole mass density inferred from integrated quasar light. The current uncertainty in both quantities is consistent with $\sim 1/2$ of all black holes having been ejected from nuclei.

It is important to leave a space between the last brace of the `\question{}` and `\answer{}` commands and the following text to ensure correct spacing following the colon separating the name from the text.

3. Compiling the Volume

Once the articles have been refereed, if desired, copy-edited, and proofread by the editors, they are ready for inserting into the volume. Assembling the main text (the articles), however, is only the first stage in preparing the volume for publication. The full process involves the following steps:

- Incorporating the articles into the main text
- Inserting any additional photographs, drawings, etc., into the main text
- Inserting the session titles, where appropriate
- Indexing the main text
- Inserting the foreword (which should have been written by now)
- Writing the preface and inserting it in the front matter

- Compiling the list of participants and inserting it in the front matter
- Inserting the conference photograph
- Requesting the ISBN, Library of Congress Control Number (LCCN), and volume number from ASP (one week before uploading the manuscript to ASP)
- Inserting the ISBN, volume number and, if available, the LCCN
- Compiling the final version of the volume as a postscript or .pdf file for your reference
- Uploading a .zip or tar.gz file to the ASP server
- Compiling the volume on the ASP server
- Notifying the ASP that the volume is compiled and ready for aesthetic review

3.1. Pagination in Volume

Each page of the volume must be included in the sequential pagination of the volume, although page numbers will appear in varying locations or not at all. For example, the page number of the first page of each paper should be centered at the bottom of the page. Even numbered pages will display the page number on the top left, followed by the author name(s), and odd-numbered pages will display the page number on the top right, preceded by the shortened title in the running head. Finally, pages with part or session headings and the blank page following should have no page numbers, but both pages are counted in the sequential pagination. With the proper commands in place, L^AT_EX should automatically paginate correctly.

Editors may determine whether they want each paper to begin on the right side only, or if papers may also begin on a left-side page. Editors may also determine if they would like pages for parts or session headings and if they would like blank pages after them so the first paper in the session begins on the right side. Editors often add photos to enhance the volume. These pictures are frequently inserted at the end of selected papers so the following paper will begin on the right-hand side without having a blank page.

3.2. Dividing the Volume into Sessions

If your volume is to be divided up into separate sessions (and this is recommended as an aid to comprehensibility), then you will need to use the `\part{}` command. Just write the name of the session between the braces.

If you would prefer to rename “Part” to, say, “Session”, then remove the % symbol in the following command in the preamble of `aspvolume.tex`:

```
%\renewcommand{\partname}{Session}
```

3.3. Incorporating the Articles into the Volume

To include an article in the volume open the file `aspvolume.tex` and scroll down until you see a column of entries (`%\include{}\last`). Remove the `%` symbol and key in the author file and path name between the braces.

To avoid compilation errors at this stage it is necessary, before trying to compile the volume, to open the author file and remove the following commands:

- `\documentclass[11pt,twoside]{article}`
- All the `\usepackage{}` commands
- `\begin{document}`
- `\end{document}`

Again, keep an eye out for extraneous author-written definitions in the preamble, which must all have been removed in the copy-editing stage. Now compile `aspvolume.tex`, which in the absence of author-generated L^AT_EX errors should compile perfectly. In the case of compilation errors open the `aspvolume.log`, which should give some indication of where the problem lies so it can be fixed.

3.4. Coping with L^AT_EX Compilation Errors

The chances of compiling a L^AT_EX document of any length without the compiler spewing out error messages are negligible, so it is useful to have some sort of understanding as to what the error messages and warnings mean, particularly since they may help us to arrive at a quick solution to the error messages and warnings given. Here, we can give only a brief summary of some of the most common error messages and warnings. For a fuller treatment, consult Lamport (1994) and Kopka & Daly (1999).

Error Messages and Warnings As already mentioned above, L^AT_EX is built on a T_EX base. Error messages and warnings are consequently either L^AT_EX or T_EX based. Those related to L^AT_EX are labeled as such so that errors and messages will begin with either

`! LaTeX Error:`

or

`LaTeX [] Warning:`

where the `[]` stands for a type of warning (e.g., `Font` for a font warning; the brackets don't appear).

T_EX-related errors are not labeled as such and are announced by `!` followed by a description of the error.

T_EX-related warnings are recognizable by not being introduced as either L^AT_EX errors or warnings, and are not preceded by `!`.

Both L^AT_EX and T_EX error announcements end in a `?` prompt.

Dealing with Errors and Warnings We shall deal with L^AT_EX error messages, T_EX error messages, L^AT_EX warnings, and T_EX warnings in that order.

L^AT_EX Error Messages

Bad math environment delimiter.

A starting command in math mode (e.g., `\[`) not properly closed (`\]` in this case).

`\begin{ }` on input line . . . ended by `\end{ }`

The environment declared by `\begin{ }` has been closed by an `\end{ }` command for a different environment. It often occurs that an opening command for an environment such as `enumerate` has not been properly closed, and the compiler will draw your attention to the said environment being closed by, say, and `\end{document}` command. One way to prevent this type of error is always to type the `\end{ }` command a few lines below the corresponding `\begin{ }` command.

Can be used only in preamble.

L^AT_EX has detected a preamble command after `\begin{document}`. Any such offending commands (e.g., `\usepackage{ }`) should be relocated in the preamble before `\begin{document}`. Another cause of this error message is a second `\begin{document}`, which should be deleted.

Command . . . invalid in math mode.

Any such offending command must be relocated outside math mode (see *Instructions for Authors*).

Environment . . . not found.

A `\begin{ }` command has called a non-existent (probably misspelled) environment. Check the spelling of the environment and correct it.

File . . . not found.

Either the filename has been misspelled or the pathname is inaccessible. Check the spelling and the pathname.

Illegal character in array arg.

An illegal character appears in the argument of an `array` or `tabular` environment.

`\include` cannot be nested.

You have tried to use the `\include` command on a file that already has an `\include` command in it. L^AT_EX does not allow the nesting of the `\include` command.

Lonely `\item`--perhaps a missing list environment.

There is an `\item` command that is not included in any list environment.

Missing `\begin{document}`.

Either the `\begin{document}` command is missing or there is some other problem with the preamble.

Something's wrong--perhaps a missing `\item`.

Among the possible causes of this message are a missing `\item` command or a missing argument in the `thebibliography` environment.

This file needs format . . . but this is . . .

You are using a package or class of document that is incompatible with the \LaTeX version that you are running.

Too deeply nested.

There are too many nested listing environments. You should be allowed four levels of nesting on any system that accepts \LaTeX . It is unwise to try and nest more levels than this.

Too many unprocessed floats.

\LaTeX saves figures and tables and inserts them while it cuts off pages. It can happen that \LaTeX is being asked to save too many floats in the setting up of a given page. Alternatively, a table or figure that cannot be printed might be causing a logjam (\LaTeX doesn't print figures or tables out of sequence). You should check the offending figure or table for possible faults. Otherwise, you might also try forcing a different placement of the figure or table using different combinations of `!`, `h` (here), `t` (top), and `b` (bottom) in square brackets with the `\begin{figure}` or `\begin{table}` command (see §3.6 of *Instructions for Authors*).

Unknown option . . . for . . .

There is an illegal option called by either the `\documentclass` or the `\usepackage` command. The option is either misspelled or cannot be used in the version of \LaTeX that you are running.

\TeX Error Messages

! Extra alignment tab has been changed to `\cr`.

There are too many `&s` in a `tabular` environment.

! Extra `}`, or forgotten `$`.

Check that you have closed math mode correctly (i.e., that there is no `}`, `\]`, `\)`, or `$` missing).

! I can't find file '`. . .`'

Either you ran \LaTeX on a non-existent file or you forgot to enclose the argument of the command `\input` with braces.

! Illegal unit of measure (pt inserted).

! Missing number, treated as zero.

Either of these messages denotes the same kind of problem. This problem often

arises from neglecting to include a unit of measurement after a number in an argument, or by omitting a command argument.

! Misplaced alignment tab character &.

You have probably keyed in just `&` instead of `\&` in the body of the text.

! Missing { inserted.

! Missing } inserted.

You should probably look earlier in the text than the line indicated in the message.

! Missing \$ inserted.

There are a number of ways this error can message can arise. One way is to forget to close a math mode expression; another occurs if `TEX` finds a blank line in math mode.

! Paragraph ended before . . . was complete.

This message appears if a command argument contains a blank line that shouldn't be there. Look for an argument that doesn't have a closing brace.

! \TeX\ capacity exceeded, sorry [. . .]

`TEX` has used up all its processing capacity and has aborted the operation.

- The `buffer size` can be exceeded by an over long argument of a sectioning or `\caption` command.
- If you have used the `\hyphenation` command with too long an argument you will exceed the `exception dictionary`. A way round this difficulty is to use insert `\-` between the syllables of words to be broken at the end of lines.
- The `main memory size` can be exceeded in three ways: 1) by defining too many long and complicated commands, 2) by having too many `\index` commands on a single page, and 3) making a page so complicated that `TEX`'s capacity to process it is exceeded. One way to check whether you have genuinely exceeded `TEX`'s capacity is to insert a `\clearpage` command. If `TEX` now doesn't run out of space, then you really did exceed `TEX`'s capacity and must readjust the complexity of the text. If not, then there is some other error in the file and it is a question of tracking it down. If you did exceed `TEX`'s capacity, you can try inserting a `\newpage` command at a suitable point in the paragraph. This should enable `TEX` to complete the current page, leaving the rest of the paragraph until the following page.
- If you use too many long cross-referencing labels or new command names names, you might exceed the `pool size`. Use smaller labels and command names. the `pool size` can also be exceeded by forgetting to close the argument of a counter command such as `\setcounter`.
- If you nest certain environments too deeply (e.g. `itemize`) you might exceed the `save size`.

L^AT_EX Warnings

Citation ‘. . .’ on page . . . undefined.

You have a `\cite` command that isn’t defined by a `\bibitem` command in the environment `thebibliography`.

Command . . . invalid in math mode.

This probably means that you have tried to use `\boldmath`, `unboldmath`, or size-changing commands in math mode. You need to take them outside math mode.

Float too large for page by . . .

The table or figure is too large (by the number of points specified) for the page size and is printed on an oversize page by itself.

Font shape ‘. . .’ in size . . . not available.

Your computer does not have the font size specified and L^AT_EX will use another font in its place.

`h` float specifier changed to `ht`

`!h` float specifier changed to `!ht`

Where `h` or `!h` has been used the figure or table could not fit on the page concerned so it will be placed at the top of the following page.

Label ‘. . .’ multiply defined.

The same argument has been given for two `\label` or `\bibitem` commands. Make sure that all such arguments are always unique.

Labels(s) may have changed. Rerun to get cross-references right.

You will tend to get this error if you run L^AT_EX on a file while you continue to work on it. The error message disappears on rerunning the file (if you don’t rerun and examine the input you will find `?` in place of your cross-reference labels).

Reference ‘. . .’ on page . . . undefined.

There is no `\label` command defining a `\ref` or `\pageref` argument.

Some font shapes were not available, defaults substituted.

You have called a font that is not available on your computer.

There were multiply-defined labels.

You have used the same argument for two different applications of a `\label` command.

There were undefined references or citations.

There is no `\label` corresponding or bibliography entry for a `\ref` or `\cite` command in the text.

You have requested release ‘. . .’ of L^AT_EX,
but only release ‘. . .’ is available

You are using a document class or package that is unavailable on the version of L^AT_EX that you are using. You need the latest version of L^AT_EX.

T_EX Warnings

Overfull \hbox . . .

Before you try to correct the text for this warning, check that the offending lines are indeed perceptibly longer than they should be; in most cases this message can be ignored. This message will give you the amount in points (1 pt = 1/72 inch) by which the \hbox exceeds the established length of the line. You can usually get round this by forcing hyphenation using \- between syllables or the \hyphenation command (e.g., \hyphenation{mo-lec-u-lar}).

Overfull \vbox . . .

This warning indicates that the text extends beyond the bottom of the page. It occurs only when the page has a very large vertical box exceeding the value of \textheight.

Underfull \hbox . . .

T_EX has left-justified a line and left wide interword spaces. This can happen when the sloppypar environment or the \sloppy declaration is used. It can also arise from using the \ or \newline command.

Underfull \vbox . . .

Sometimes T_EX will produce a page with too little text on it and with too much vertical space. You can overcome unwanted pagebreaks with the command \nopagebreak[n], where n is a number between 0 and 4. The higher the number, the greater the compulsion on T_EX to avoid a pagebreak.

Problems with .aux Files The .aux file contains all the information generated by L^AT_EX relating to cross-referencing of bibliographical citations, sectioning, floats, etc. The aspvolume.tex file calls author .tex files using the \include command, which initiates .aux for each of the author files. These author .aux files are closed when the file has finished being processed. When an error message or warning is given, the line number referred to is the line of the document currently being processed. The name of the file being processed can be found by examining the .log.

When All Else Fails: Searching the File Manually A last resort method of tracking down elusive errors is to eliminate everything in the .tex file between \begin{document} and the last page of output and rerun L^AT_EX. Keep cutting and rerunning in this way until you find the error.

3.5. Photographs of Individual Participants and Events

Photographs of conference participants and events enhance the volume, and editors are encouraged to include them when possible without exceeding page limitations. Photographs must be scaled and positioned to fit within the margins, must be scanned or saved in .eps format, and must be high resolution (266–600

dpi) to reproduce well. Captions describing the photo or listing the names of the individuals make the photographs more interesting. Captions should describe the photo in black and white unless paying for color printing.

Use `\plotone{}`, `\plottwo{}`, and `\plotfiddle{ }{ }{ }{ }{ }` (in that order of preference) for inserting photos of participants and social events throughout the text. `\plotone{}` should meet most of your needs, but if any fiddling around becomes necessary, the `\plotfiddle{ }{ }{ }{ }{ }` should handle the most difficult cases (see *Instructions for Authors* for a full discussion of these commands). These commands must be used within a figure environment.

Photographs that take up half a page or less can be inserted at the end of articles where there is less than a third of a page of text. If you devote a whole page to a photograph (or set of photographs), be sure to suppress the page number and running heads. To achieve this, write at the end of the preceding article or between articles in the main book file (`aspvolume.tex`):

```
\clearpage
\thispagestyle{empty}
\mbox{}
\pagebreak
```

Note, however, that if there is already a blank page (as will occur, for example, when the final article of a session ends on an odd-numbered page, in which case a blank page will be inserted automatically before the next session title page) you needn't key in the above lines.

The photograph(s) can then be inserted using `\plotone{}`, `\plottwo{ }{ }`, or `\plotfiddle{ }{ }{ }{ }{ }` after `\mbox{}` (the argument of `\mbox{}` must be left empty).

3.6. Front Matter

The pages of a book preceding the main text is called the front matter. Front matter pages are numbered with roman numerals. The main text is given arabic page numbers (starting from 1).³

The front matter of a volume may consist of all or part of the following elements:

- The half title page (obligatory)—page i
- The verso of the half title page (obligatory)—page ii
- The title page (obligatory)—page iii
- The copyright page (obligatory)—page iv

³Re-initiating the page numbering of the main text originates mainly from the difficulties publishers and editors faced when pages were deleted or inserted in the front matter; when this occurred the page numbering of the main text had to be re-typeset, which was an expensive business. Computer typesetting, with its automatic page numbering and cross-referencing facilities, has eliminated such difficulties, but it is still felt that continuing the page numbering sequence of the front matter into the main text is aesthetically unappealing.

- A dedication (optional)—page v, if present
- The table contents (obligatory)—page v or page vii, if dedication is included
- A foreword (optional)
- The preface (obligatory)
- An acknowledgement (optional, may be included in preface)
- A list of organizing committee members (optional, may be appended to the preface)
- A conference logo and/or agenda (optional)
- A list of participants (not obligatory, but recommended)
- A conference photograph (not obligatory, but recommended)
- A conference photograph caption or key (not obligatory, but recommended)

These will be generated when you compile the `aspvolume.tex` file (you will need to do this twice to ensure that all the features of the front matter appear, once to create the `aspvolume.aux` file and again to get a complete `aspvolume.dvi` file for viewing on-screen).

Pages i–iv never vary in their numbering. As editor, you will need to provide several items of information for each of these pages, but this is best done right at the end of the copy-editing process, so how to input the required information is explained in §5 of this manual.

Dedication/In Memoriam Page This page is optional. In fact, there is very rarely a need for a dedication page in a proceedings. Exceptions would be an *In memoriam* (as, for example, on page v of volume 249 of the ASP Conference Series) or a dedication to an outstanding researcher in the field covered by the volume. Editors determine whether to include a dedication, to whom the book is dedicated and phrasing of the dedication. See *Chicago* for more information. The dedication page should appear before the table of contents, on page v.

The Table of Contents The macros allow for automatic compilation of the table of contents. The table of contents will be automatically updated with any pagination changes in the volume when L^AT_EX is run twice. In the `aspvolume.tex` file, a `\tableofcontents` command is placed in the front matter which will dynamically create the table of contents. Book parts (those generated with `\part`) are automatically added to the table of contents. However, the editor must add the entries for the individual articles using the `\tocentry` command. The syntax for this command is as follows:

```
\tocentry{Article Title}{List of Authors}
```

This command is added in the main L^AT_EX document (`aspvolume.tex`) preceding the inclusion of the article. An example of its use follows:

```

:
\tocentry{Participants}{
\include{participants}
:
\part{Astrometry from Space}
:
\tocentry{Overview of the Gaia Mission}{M. A. C. Perryman}
\include{perryman/perryman2}
:

```

The following important style guidelines must be followed for table of contents entries:

1. The article title *must* match the paper’s actual title exactly.
2. All authors *must* be listed in the table of contents. Initials may be used with surnames to save space, if desired.
3. Invited speakers may be designated parenthetically after the author’s name, as follows: {M. A. C. Perryman (Invited Speaker)}
4. Additional content may be added to the table of contents using the command `\addtocontents`. This may be useful, for example, to add a page break before a part heading, ensuring the page does not break between the heading and the first paper that follows. The syntax for this command is as follows:

```
\addtocontents{toc}{line to be added}
```

5. An unnumbered heading may be added to the table of contents using `\addtocontents` and the `\unpartline` command (e.g., an unnumbered heading for the indexes). The syntax for an unnumbered part heading titled “Indexes” would be as follows:

```
\addtocontents{toc}{\protect\unpartline{Indexes}}
```

It is necessary to compile `aspvolume.tex` twice before the table of contents will be fully inserted. Thereafter, if there are changes in page numbering or additions, it will also be necessary to run L^AT_EX twice on the book file to update the table of contents.

It is important to check the table of contents thoroughly for any errors including the following:

- Titles running beyond the line of dots (use `\` in the text of the title following the `\tocentry` command to enforce line breaks where necessary)
- Hyphenation of words in the titles, which should be avoided (use `\` to enforce line breaks where necessary)

- Authors' first names or initials separated from their surnames (join the names using the ~ link and use the \\ command to enforce line breaks where necessary)
- Part or session titles appearing alone at the bottom of the page (use `\addtocontents{toc}{\newpage}` to force a page break before the heading)
- Titles or lists of author names which are incomplete or do not exactly match the paper, although initials may be used throughout the table of contents to save space
- Lack of conformity between table of contents entries (e.g., all invited speakers should be designated in same manner; all author names should use the same format, either initials with surname or full name)

The Foreword A foreword comprises a brief introduction by an eminent authority in the field covered by the volume. The author's name may appear on the title page: "With a Foreword by . . ." Most conference proceedings don't include a foreword, so `aspvolume.tex` ignores the foreword page by default. To raise a foreword, you need to:

1. Open the `aspvolume.tex` file and remove the % before the commands `\tocentry{Foreword}` and `\include{foreword}`
2. Save the modified `aspvolume.tex` file
3. Open the file `foreword.tex`
4. Insert the text of the dedication, as instructed in the file
5. Insert the signature of the writer of the foreword
6. Save and close the modified `foreword.tex` file

The Preface A preface may be regarded as an obligatory feature of any conference proceedings, since it is here alone that the editors will get a chance to make a few remarks concerning why the topic of the conference was considered to be timely when the meeting was held, etc. The preface could include the primary aims of the conference, how the goals were achieved, and an acknowledgement of specific institutions or individuals. It does not need to be signed, as it is typically assumed that it was written by the editors, or it may be signed simply, "The Editors."

To create a preface:

1. Open the file `preface.tex`
2. Insert the text of the preface, as instructed in the file
3. Save and close the `preface.tex` file

The List of Participants The file `participants.att` is used as input for the participants list and is called by the file `participants.tex`. To create a list of participants you need to:

1. Open the file `participants.att`
2. Fill in the four arguments of the command `\attendee{\sc }{}{}{}` for each attendee in the following order:
 - (a) Attendee's initials and surname (in that order) or, if preferred, full name with surname last (be consistent throughout)
 - (b) Attendee's email address
 - (c) Attendee's affiliation
 - (d) Attendee's working address
3. Delete any remaining blank entries
4. Save and close the `participants.att` file

The Conference Photograph The group photograph is widely regarded as an essential feature of any conference proceedings—it is also historically useful as a visual record of who attended the meeting. We recommend cropping the photograph to focus mainly on the people, then scaling the image to best fit the page, while remaining within the margins. If the group of participants is particularly large, we suggest a) splitting the group photograph into two parts and placing both halves side by side, b) taking separate left- and right-hand photographs, or c) using multiple small group photos. Under these circumstances, the images may occupy an even-numbered page and the following odd-numbered page (so that both images are seen when the book is opened). If opting for a double-page spread for the group photograph, the final page of the list of participants must end on an odd-numbered page or, if it ends on an even-numbered page, a totally blank page (i.e., with no running head or page number) must be inserted between it and the conference photograph, as described in step 6 below.

Some editors include a list of names identifying each participant, either listed in a caption below the photograph using a figure environment, or in a separate key, which gives identification through an outline or numbering system on the subsequent odd-numbered page. With a two-page spread, the orientation of both pages should be the same.

Getting the group photograph into the volume is fairly straightforward. Proceed as follows:

1. Compile the file `aspvolume.tex` twice (to get all the cross-referencing and page numbering right)
2. Display the `aspvolume.dvi` file on the screen and go to the end of the list of participants
3. Make a note of whether the list ends on an odd- or an even-numbered page
4. Open the file `conf_photo.tex`


```

\newcommand{\nindex}[1]{\index*[not]{#1}}
\newcommand{\aindex}[1]{\index[aut]{#1}}
\newcommand{\sindex}[1]{\index*[sub]{#1}}
\newcommand{\oindex}[1]{\index*[obj]{#1}}
\newcommand{\minindex}[1]{\index*[mol]{#1}}
\newcommand{\nn}[1]{#1n}
%\proofmodetrue
:
\backmatter
%\markboth{List of Notation}{List of Notation}
%\tocentry{List of Notation}{}
%\printindex[not]
%\markboth{Author Index}{Author Index}
%\tocentry{Author Index}{}
%\printindex[aut]
%\markboth{General Index}{General Index}
%\tocentry{General Index}{}
%\printindex[sub]
%\markboth{Object Index}{Object Index}
%\tocentry{Object Index}{}
%\printindex[obj]
%\markboth{Spectral Feature Index}{Spectral Feature Index}
%\tocentry{Spectral Feature Index}{}
%\printindex[mol]

```

If you are not a L^AT_EXnician, there's nothing to worry about. All you need do is, first of all, decide what kind of indexes you want in the volume; you have the following choices:

- A list of notation
- An author index
- A subject, or general, index
- An object index
- A molecular/atomic/ionic species index

If these choices do not meet your requirements, then read §4.2. The ASP book template (`aspvolume.tex`) contains the instructions for telling L^AT_EX to print out the various indexes in the back matter (see the last fifteen lines of the template). Simply remove the comment mark (“%”) at the beginning of each line that corresponds to those indexes you wish to include. For example, to include a general subject index, you would uncomment three lines, as follows:

```

\markboth{General Index}{General Index}
\tocentry{General Index}{}
\printindex[sub]

```

You will also need to tell L^AT_EX which items are to be indexed. All indexing commands must be placed inside the .tex files for the individual papers. The indexing command to include an author's name in the author index might be placed below the author affiliations in each paper, while the command to include an item in the subject or object index would be placed within the text where the word occurs. The `aspvolume.tex` macro offers five commands to do this, one for each type of index:

- `\nindex{}` places an item in the List of Notation
- `\aindex{}` places an item in the author index
- `\sindex{}` places an item in the subject index
- `\oindex{}` places an item in the object index
- `\mindex{}` places an item in the spectral feature index

All you have to do is to insert—at the point in the main text where the word or phrase actually occurs—the relevant command, with the word or phrase that you want indexed between the braces. Unlike the standard indexing commands in L^AT_EX, enclosing a piece of text within these commands puts the words/phrases in the index without removing them from the body of the text. Another rather neat little trick is the `\proofmode>true` command, which writes the indexed words in the margins of the page where they occur. This is a very useful feature to invoke when editing (although, of course, the command will need to be commented out again when producing the final copy!).

The arguments of the `\nindex{}`, `\aindex{}`, `\sindex{}`, `\oindex{}`, and `\mindex{}` commands have a degree of syntactical flexibility that enables you to format the index entries. Just for the sake of simplicity, we shall look at the ways in which the argument of `\sindex{}` (whatever applies to `\sindex{}` applies equally to the other four indexing commands) can be used to create different index entry formats.

Levels of Indexing The `index` environment allows three levels of indexing. The syntactical operator `!` is used to separate entries, subentries, and subsubentries. Here is an example of the `!` operator in action:

A typical set of entries might be:

```

\sindex{dark mass}           (page 100)
\sindex{disks}              (page 94)
\sindex{disks!stellar}      (page 89)
\sindex{disks!stellar!inner} (page 110)

```

which would produce:

```

dark mass, 100
disks, 94
  stellar, 89
    inner, 110

```

Other Syntactical Features There is a useful cross-referencing marker, *see*, which is invoked as in the following example:

```
\sindex{spiral nebulae|see{galaxies, spiral}}
```

will produce

spiral nebulae, *see* galaxies, spiral

Another presentational feature that can be included is italicizing either the entry words or the page numbers. You can also arrange symbols alphabetically.

```
\sindex{Darwin@\textit{Darwin}}           (page 175)
\sindex{delta T@$\Delta T$}              (page 20)
\sindex{Dwingeloo Radio Observatory|textit} (page 113)
\sindex{Delta Cephei@$\delta$ Cephei}    (page 153)
\sindex{Dicke, Robert Henry|nn}         (page 114)
\sindex{Delta Aquarid meteors}          (page 5)
```

will produce:

Darwin, 175
Delta Aquarid meteors, 5
 δ Cephei, 153
Dicke, Robert Henry, 114n
 ΔT , 20
Dwingeloo Radio Observatory, *113*

The entry for *Dicke, Robert Henry* has an *n* after the number, indicating that the reference is to a footnote on page 114. This footnote marker for the index is defined in the `aspvolume.tex` macro. Italic page numbers might refer, for example, to illustrations.

Creating the Index Now that you have added index entries to the files, you will be ready to create the index(es) when the volume is compiled. During compilation, it will be necessary to compile the index as directed in §6.1 before the index will appear at the back of the volume. Whenever the page numbers in the volume change as the editing of the volume progresses, it will be necessary to recompile the indexes to update them.

4.2. Changing the Name of an Index

To change the name of, say, the subject index to “General Index” open the `aspvolume.tex` macro and change the command that reads

```
\newindex{sub}{sdx}{snd}{\Large Subject Index}
```

to

```
\newindex{sub}{sdx}{snd}{\Large General Index}
```

5. Pages i–iv and Front Cover Illustrations

It now remains for you to complete pages i–iv of the front matter and the front cover. So far, you still have insufficient information to do this, and if you try to compile the volume at this stage, pages i–iv will look like Figures 1, 2, 3, and 4 (at the end of this manual).

5.1. Volume, LCCN, and ISBN Numbers—How to Get Them

To complete the job of copy-editing, about one week before uploading your manuscript to the ASP server, go to “Step 3. Submitting The Manuscript” at http://www.aspbooks.org/step3_submitting/ to download a Submission Form. Fill in the form and email it to Enid Livingston (aspcs@byu.edu) to receive the following information:

- The volume number
- The year of publication
- The International Standard Book Number (ISBN) for your volume
- A Library of Congress Control Number (LCCN), which will be requested at this time
- An account and password to upload your files to the ASP (more information may be found in §6.2)

The volume number is needed for:

- The slug
- The verso of the half title page (page ii)
- The title page (page iii)

The year of publication, ISBN and LCCN will all appear on the copyright page (page iv). The LCCN will either be inserted by us or sent to you after it is applied for and received.

The following subsections describe what should appear on pages i–iv. How to insert the relevant information is described at the end of this subsection.

The Half Title Page The half title page (always page i) contains the main title and a description with an acknowledgment for the cover illustration, which is normally a picture or diagram chosen from one of the articles that is considered to be particularly emblematic of the theme of the meeting.

The Half Title Verso The verso of the half title page (always page ii) contains details concerning the ASP Conference Series (editorial staff, the Publication Committee members, etc.). You will need to ensure that the volume number appears on this page, but you will not need to open the file (`halftitle_verso.tex`) to do this.

The Title Page The title page (always page iii), as the name suggests, contains the title of the conference. Also included are:

- The volume number
- The venue and dates of the meeting
- The names and affiliations of each editor

The Copyright Page This page (always page iv) contains:

- The year of publication
- The LCCN data
- The ISBN

5.2. Completing Pages i–iv and the Slug

Inserting all the relevant parameters that define the volume bibliographically is simply done by inserting them into the style file. When the file `aspvolume.tex` is compiled twice—assuming that the input file for the participant list is completed—the book should now appear in its final form. Here is how you add in the volume information:

- Open the style file (`asp2006.sty`).
- Replace `**VOLUME**` in the line `\def\@jourvol{**VOLUME**}` with the volume number (obtained from Enid Livingston). This will cause the volume number to be inserted in the slug and wherever else in the volume it needs to appear.
- Replace `**YEAR OF PUBLICATION**` with the correct year in the line `\def\cpr@year{**YEAR OF PUBLICATION**}`. This will cause the correct year of publication to appear in the slug and the copyright page. Don't try to guess the correct year of publication: get it from Enid Livingston.
- Replace `**FULL TITLE**` with the full title (i.e., main title and subtitle, if any) in the line `\def\vol@title{**FULL TITLE**}`. This will write the full title in the title page and in the slugs.
- In the line that reads `\def\vol@author{**NAMES OF EDITORS**}`, replace `**NAMES OF EDITORS**` with the names of all the editors (each editor's name separated by commas and the word *and*—not an ampersand—between the names of the last two editors). This will cause the editors names to appear in the slugs (but not yet in the title page).
- In `\newcommand{\halftitle}[1]{**MAIN TITLE**}`, `**MAIN TITLE**` should be replaced with the main part of the title of the conference in all caps. The half title page typically includes only the main title, although a subtitle may be included if it is an integral part of the title and useful for clarity. This causes the main title to appear on the half title page.


```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% HALFTITLE PAGE %%%%%%%%%
\newcommand{\halftitle}[1]{BLAZAR VARIABILITY WORKSHOP II: ENTERING THE
GLAST ERA}
\newcommand{\blurb}[1]{Radio monitoring of BL~Lac, as observed at the
University of Michigan Radio Observatory (figure courtesy M.~Aller)}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% TITLE PAGE %%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% (COMMENT OUT THE UNNEEDED COMMANDS) %%%%%%%%%
\newcommand{\maintitle}[1]{BLAZAR VARIABILITY WORKSHOP II:
ENTERING THE GLAST ERA}
\newcommand{\venue}[1]{Florida International University, Miami, Florida,
USA}
\newcommand{\when}[1]{10--12 April 2005}
\newcommand{\firsteditor}[1]{H. R. Miller}
\newcommand{\firstaffil}[1]{Georgia State University, Atlanta, Georgia,
USA}
\newcommand{\secondeditor}[1]{K. Marshall}
\newcommand{\secondaffil}[1]{Georgia State University, Atlanta, Georgia,
USA}
\newcommand{\thirdeditor}[1]{J. R. Webb}
\newcommand{\thirdaffil}[1]{Florida International University, Miami,
Florida, USA}
\newcommand{\fourtheditor}[1]{M. F. Aller}
\newcommand{\fourthaffil}[1]{University of Michigan, Ann Arbor, Michigan,
USA}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% COPYRIGHT PAGE %%%%%%%%%
\def\@LCCN{2006925679}
\def\@ISBN{1-58381-218-0}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

The result is shown in Figures 5, 6, 7, and 8 at the end of this manual.

5.3. Front Cover Illustrations

The front cover illustration is normally a picture or diagram chosen from one of the articles considered to be particularly emblematic of the theme of the meeting. Select a good-quality illustration for the front cover and save the file separately as an .eps or .tiff file, making it clear that it is for the cover (e.g., `cover.eps`). Single color illustrations are included in the cost of the volume; however, cover illustrations may be reproduced in color at a cost of \$1,000.00 for the entire print run. The volume will still retain its standard ASP blue cover design for text and ASP logo, but the illustration will be in color. Single color illustrations may be submitted as a shaded or grayscale image. The printer will do a 10% screen of color, giving the impression of shading, but it is still considered only a single color.

As described in §5.2, insert a description for the front cover illustration to appear at the bottom of page i. Remember to acknowledge the source of the illustration, and include a page number if the cover image is taken from one of the contributions in the volume. If it has been previously published, obtain permission from the publishing company and the author and include an acknowledgement or recognition after the description of the illustration. Items which might be mentioned include the following:

- Description of image
- “Image courtesy of . . .
- “By the kind permission of . . .
- Volume number, author and page number
- Copyright held by whom and where

For example, the following might be included after the image description: “BY THE KIND PERMISSION OF KLUWER.” If it appears in the current volume but has never been published before, you may simply state: “Referenced in the current volume: Rutten et al., Fig. 1, page 250.”

6. Compiling the Volume on Your Computer

You should by now have incorporated all the L^AT_EX files for the preface, participants list, conference photograph, and author files as inputs to the book file `aspvolume.tex`, as well as added the entries for the table of contents. You should also have tailored the file `participants.att` (called by the file `participants.tex`) to the requirements of your volume.

To compile the volume in full, it is necessary to create the indexes, as described in the following subsection.

6.1. Compiling the Index(es)

If you have set all the commands for indexing in place in your volume file, raised a number of index entries as described above, and run L^AT_EX once, you should find (if your book file is called `aspvolume.tex`) that you have generated the following files:

```
aspvolume.adx
aspvolume.idx
aspvolume.mdx
aspvolume.ndx
aspvolume.odx
aspvolume.sdx
```

When you display the compiled file on-screen, you will see that no indexes have been generated yet. If you open the `.adx`, `.idx`, `.mdx`, `.ndx`, `.odx`, or `.sdx` files,

you will see that index entries have been listed, even though there is no index yet.

Now type the command

```
makeindex aspvolume
```

This will create two further files: `aspvolume.ilg` and `aspvolume.ind`. So far, there are still no indexes. To get these you will need to generate separate index input files for each index before finally running L^AT_EX a second time (when the indexes *will* appear at last). Let's assume we want separate author, object and subject indexes. We then need to tell L^AT_EX to do this by running the following commands:

```
makeindex -o aspvolume.and aspvolume.adx (for the author index)
makeindex -o aspvolume.ond aspvolume.odx (for the object index)
makeindex -o aspvolume.snd aspvolume.sdx (for the subject index)
```

When you do this, you should find that the files `aspvolume.and`, `aspvolume.ond`, and `aspvolume.snd` have been created.

Now re-run L^AT_EX and visualize the result on-screen. You should now find that the indexes appear at the end of the volume.

6.2. The Final Product

If you have the `\proofmodetrue` command active inside your volume file, then the index entries will be printed in the margin of the pages where the index items occur. This is a very useful feature to take advantage of while you are editing, but when you come to prepare the final version of the volume, remember to comment out the command (i.e., ensure that you have `%\proofmodetrue`) so that the margin entries disappear.

You should now prepare the volume files and upload them to ASP. For complete instructions on uploading your files, accessing the server and compiling your volume on the ASP server, go to the following web site:

<http://aspcs-linux.byu.edu>

7. Summary of Editors' Responsibilities

- Prepare the articles for inclusion in the volume (copy-editing), using the reference works recommended in this manual and in *Instructions for Authors*.
- If the contribution is incomplete (missing files, etc.), ask the author for whatever is missing.
- *If the contribution doesn't compile properly, return it to the author for correction.*

- Review the articles and contact the author concerning any recommended changes.
- Check for general questions of format and style (running heads, abstracts, titles, author names and addresses, margins, slugs, proper use of capitals in section and running heads, etc.).
- Verify that all page numbers are correct, in sequence, within margins, and that the author and shortened title running heads are correct for the paper.
- Check that each individual paper, front matter and indices are included.
- Check that the use of section levels is logical.
- Check that tables are correctly positioned in the text within margins, that they are properly formatted, and that they are referred to in the text.
- Check that figures are correctly positioned in the text within margins, that they are of sufficient resolution, that they are referred to in the text, that any labeling is legible, that they do not cover any text or running heads, and that proper permissions have been granted and acknowledged.
- If there are acknowledgements at the end of the article, ensure that the author has used the `\acknowledgements` command and not the commands `\begin{Acknowledgements}`, `\end{Acknowledgements}`.
- Check that all references quoted in the text are listed in the bibliography, and that there are no items in the bibliography that are not referred to in the text.
- Using the indexing commands described in §4.1, identify all items to be indexed and the index (if there is more than one) to which they should be allocated.
- Check the table of contents for proper spacing, appropriate line breaks, no hyphenation, appropriate page breaks (part titles appear with at least one paper), and consistency with actual paper titles and author names.
- A week before you are ready to upload the volume manuscript to the ASP, request from Enid Livingston:
 - The volume number
 - The year of publication
 - The LCCN for the volume
 - The ISBN for the volume
 - An account and password to upload files to ASP
- Compile the final PDF version of the book on your computer and check the file completely for any problems.

- Upload zipped files to ASP at <http://aspcs-linux.byu.edu/upload/>, compile the volume on the ASP server and check each page of the file for any problems or errors. The master files now reside at the ASP, and all revisions must be made only to these files. See instructions at <http://aspcs-linux.byu.edu> for more information.
- Email Enid Livingston at aspcs@byu.edu when the volume is compiled and you are ready to submit it for her aesthetic review.
- If not already done, send a list of all recipients of the printed volumes to aspcs@byu.edu (names, addresses—with complete postal addresses and not PO boxes—telephone numbers and email addresses). If possible, use the Excel form available with the online Editors' Information, in "Step 1. Getting Started," found at http://www.aspbooks.org/step1_getting_started/.

After you have compiled the volume on the ASP server, Enid Livingston will review the volume for aesthetic problems. *Please send the PDF file to the other co-editors for a thorough final review at the same time. Past experience has proven that additional readers help catch editorial errors.* If necessary, take a two-week break from the book before doing a final copy-edit in order to look at it with fresh eyes. Corrections are much more expensive to make once the volume has been sent to the printer.

Enid will provide a list of corrections for you to correct in the files on the ASP server. If you wish to check out the files to work on them on your own computer and upload again, you will need to use Subversion software. Find more information on this version control software at <http://aspcs-linux.byu.edu>. *When all the co-editors are finished with final copy editing and any necessary corrections have been made, notify Enid that the volume is ready to be sent to the printer.*

Well done! You have now almost completed your job as an editor; it now only remains for you to check the final proofs. After the volume has been sent to the printer, all corrections must be made by the ASP. Technical corrections will be made free of charge, but editorial corrections will be billed to the editor. You will be asked to check the proofs and supply a list of necessary corrections. At the moment, once the volume has been sent to the printer, the production process (creating proofs and making proof revisions, the printing itself, and the dispatch of volumes to subscribers) takes about four months—less if the volume has been carefully prepared.

References

- Goossens, M., Mittelbach, F., & Samarin, A. 1997, *The L^AT_EX Companion*, edn 2 (Reading, Mass.: Addison-Wesley)

****MAIN TITLE***

COVER ILLUSTRATION:

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Figure 1. Sample “blank” half title page.

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Figure 2. Sample “blank” half title verso page.

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Figure 3. Sample “blank” title page.

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Figure 4. Sample “blank” copyright page.

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ENTERING THE GLAST ERA

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Radio monitoring of BL Lac, as observed at the University of Michigan Radio Observatory
(figure courtesy M. Aller)

Figure 5. Half title page for volume 350.

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Figure 6. Half title verso page for volume 350.

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ENTERING THE GLAST ERA**

Proceedings of a workshop held at
Florida International University Miami, Florida, USA
10–12 April 2005

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Figure 7. Title page for volume 350

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Figure 8. Copyright page for volume 350.