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Volume **Volume**

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ASTRONOMICAL SOCIETY OF THE PACIFIC
CONFERENCE SERIES

Volume **Volume**

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Foreword

Forward text goes here.

Author

Author's Title

Preface

Preface text goes here.

Preface Author

Part I

For Authors

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ASP Author Template

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Abstract. This is the Astronomical Society of the Pacific (ASP) 2021 author template file. This sample author template includes some common L^AT_EX 2_ε formatting examples and the ASP author checklist.

1. The Template

To fill in this template, make sure that you read and follow the ASPCS Instructions for Authors and Editors available for download online.¹ Further hints and tips for including graphics, tables, citations, and other formatting helps are available there.

1.1. The Author Checklist

The following checklist should be followed when writing a submission to a conference proceedings to be published by the ASP.

- ☐ Article is within page limitations set by editor.
- ☐ Paper compiles properly without errors or warnings.
- ☐ No fundamental modifications to the basic template are present, including special definitions, special macros, packages, `\vspace` commands, font adjustments, etc.
- ☐ Commented-out text has been removed.
- ☐ Author and shortened title running heads are proper for the paper and shortened so page number is within the margin.
- ☐ Paper checked for general questions of format and style, including, but not limited to, the following:

¹Most URLs should be in a footnote like this one. In this case, you can download the online material from <http://www.aspbooks.org>.

- ☐ capitalization, layout, and length of running heads, titles and sections/subsections;
 - ☐ page numbers within margin;
 - ☐ author names spelled correctly and full postal addresses given;
 - ☐ abstracts;
 - ☐ all margins—left, right, top and bottom;
 - ☐ standard font size and no Type 3 fonts;
 - ☐ spacing;
 - ☐ section headings.
- ☐ All tables are correctly positioned within margins, are properly formatted, and are referred to in the text.
 - ☐ All figures are correctly positioned within margins, are minimum 300 dpi resolution, not too dark or too light, do not contain embedded fonts, and are referred to in the text. All labeling or text will be legible with 10% reduction. Questionable images printed, checked, and replaced if necessary. Figures do not cover text or running heads, and proper permissions have been granted and acknowledged. For ease of integration and to minimize the size of the figure files, it is highly recommended that ‘eps’ files not be used in favor of ‘png’ or ‘jpg’ image files.
 - ☐ All acknowledgments and discussions are in proper format.
 - ☐ If there are acknowledgments at the end of the article, ensure that the author has used the `\acknowledgments` command and not the commands `\begin{Acknowledgments}`, `\end{Acknowledgments}`. Acknowledgments should only be used for thanking institutions, groups, and individuals who have directly contributed to the work.
 - ☐ All references quoted in the text are listed in the bibliography; all items in the bibliography have been referred to in the text.
 - ☐ All bibliography entries are in the proper format, using one of the referencing styles given. Each of the references is bibliographically complete, including full names of authors, editors, publishers, place of publication, page numbers, years, etc. If using Bib_TE_X a complete Bib_TE_X file is ready to submit to the editor.
 - ☐ References to preprints replaced with publication information when possible.

2. Compiling

It is highly recommended that all figures be non-‘eps’ format, i.e., ‘png’ or ‘jpg.’ For this case, compiling this article is done simply by using the command `pdflatex` at least twice on the command line from inside the same folder as the article LaTeX ‘.tex’ file. If there are references to ‘eps’ image files, pdfLaTeX will not work, and the images should be converted to a non-‘eps’ type of image file format.

3. Text

Sometimes you just need to have different styles of fonts. *Sometimes you just need to have different styles of fonts.* **Sometimes you just need to have different styles of fonts.**

Sometimes you just need to have different sizes of fonts. Sometimes you just need to have different sizes of fonts. Sometimes you just need to have different sizes of fonts. It would be very rare to require larger fonts within an ASP volume.

4. Math

Sometimes authors include formulas inside the main text which should always be enclosed within \$ signs. Look at the Pythagorean Formula $a^2 + b^2 = c^2$.

Sometimes authors include formulas on their own lines. This example uses the `displaymath` environment which does not include an equation number. To include an equation number, use the `equation` environment.

$$c = \sqrt{a^2 + b^2} \quad \text{Pythagorean Theorem}$$

5. Lists

There are a lot of ways to make lists including itemized lists with bullets (`\begin{itemize}`), numbered lists (`\begin{enumerate}`), and description lists (`\begin{description}`). This is an example of an itemized list.

5.1. Itemized Lists

Here is an itemized list:

- Item 1
- Item 2

6. Table

Here is an example table that has three columns with various justification and row spacing.

Table 1. Tables in L^AT_EX 2_ε

First Column	Second Column	Third Column:
First Row, First Column	First Row, Second Column	First Row, Third Column
Second Row, First Column	Second Row, Second Column	Second Row, Third Column
Third Row, First Column	Third Row, Second Column	Third Row, Third Column

These tables can get a little messy, but this format is the most common.

7. Images

For some figures, see Figures 1- 2. These figures have been converted to the ‘png’ image format. Notice that the references to the figures do not need to include the file extension and that the pdfLaTeX compiler recognizes the non-‘eps’ image files.



Figure 1. Welcome to 1953. Size adjusted to be a little smaller than full.



Figure 2. Now there are two of them. *Left*: An image from long ago. *Right*: The same exact thing.

There are also the landscape versions `\articlelandscapefigure` and other image commands that are further described in the instructions.

Acknowledgments. The ASP would like to thank the dedicated researchers who are publishing with the ASP. Keep this text on the same line as the `\acknowledgements` command because it makes things a lot easier.

References

The first reference. This reference may span the width of the page and should be in the format described in the instructions.

The second reference. This reference may also span the width of the page and should be in the format described in the instructions.

The third reference. If there is a URL in here make sure to put it in the right way.

See http://www.somewhere.com/see_there's%still_characters_here

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References

- Abt, H. 1990, ApJ, 357, 1
Author, E. 2010, Example Tech Report, Tech. Rep. 1, Example Institution
Butcher, J. 2006, Butcher's Copy-editing: The Cambridge Handbook for Editors, Copy-editors and Proofreaders (Cambridge: Cambridge University Press), 4th ed.
Capak, P. 2003, Ph.D. thesis, University of Hawaii
Daly, P. W. 2007, Natural Sciences Citations and References (Author–Year and Numerical Schemes), Version 8.1
de Vaucouleurs, G. 1964, in The Galaxy and the Magellanic Clouds, edited by F. J. Kerr (Dordrecht: Reidel), vol. 20 of IAU Symp., 195
Kerr, F. J. (ed.) 1964, The Galaxy and the Magellanic Clouds, vol. 20 of IAU Symp. (Dordrecht: Reidel)

Part II

For Editors

Editor's Final Checklist

General

- ☐ The book should be compiled with pdfTeX by using the pdf_latex command. This requires that all images be a file format other than 'eps' such as the 'png' or 'jpg' image file format.
- ☐ All articles received. If the contribution is incomplete (missing files, etc.), or doesn't compile properly, ask the author for whatever is missing or to correct the submission. Review the articles and contact the author concerning any recommended changes.
- ☐ All articles refereed, if applicable.
- ☐ All articles edited for grammar, style and scientific content.
- ☐ All articles included and compiled into a single volume that compiles without errors or warnings.
- ☐ Each individual paper, all front matter, and the indexes appear in the compiled volume.
- ☐ Pre-submission form sent to the editorial assistant aspcs@aspbooks.org when within two weeks of suspected submission.

Front Matter

- ☐ Pages i to iv include all necessary information and are correct.
- ☐ Front cover illustration has been designated, uploaded to the server, and appropriately acknowledged on page i.
- ☐ Dedication checked.
- ☐ Table of contents checked for the following:
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 - ☐ appropriate line breaks—titles/authors do not run into column for page number;
 - ☐ no hyphenation in titles;
 - ☐ appropriate page breaks—part titles appear with at least one paper;

- ☐ all front matter and back matter listed on correct page;
- ☐ each title matches the paper title exactly;
- ☐ all authors listed on table of contents and spelling of names match each paper.
- ☐ All pagination of front matter is correct and matches the table of contents.
- ☐ Conference Photo is as large as possible, but within margins; photo key is included, if desired. Photo appears on odd-numbered (right) page if single page layout. If key or separate page caption is included, photo appears on even-numbered (left) page with caption/key on the following page.
- ☐ One or two blank pages appear between front matter and main matter.

Main Matter

- ☐ Each paper and entire volume checked for general questions of format and style, including, but not limited to, the following:
 - ☐ slugs;
 - ☐ capitalization and layout of running heads, titles, and sections/subsections;
 - ☐ author names and addresses;
 - ☐ abstracts;
 - ☐ margins—left, right, top and bottom;
 - ☐ font;
 - ☐ spacing;
 - ☐ session or part headings;
- ☐ Author and shortened title running heads are correct for the paper.
- ☐ All page numbers are correct, in sequence, and within margins; no page numbers appear on session heading pages and blank pages.
- ☐ All tables are correctly positioned within margins, are properly formatted, and are referred to in the text.
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- ☐ All acknowledgments and discussions are in the proper format.
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Back Matter

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- ☐ Volume compiled on the ASPCS server; each page checked for any problems or errors. All necessary changes have been made to files on ASPCS server.
- ☐ ASPCS notified that the book is prepared for submission and ready for aesthetic review.

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References

- Abt, H. 1990, ApJ, 357, 1
Author, E. 2010, Example Tech Report, Tech. Rep. 1, Example Institution
Butcher, J. 2006, Butcher's Copy-editing: The Cambridge Handbook for Editors, Copy-editors and Proofreaders (Cambridge: Cambridge University Press), 4th ed.
Capak, P. 2003, Ph.D. thesis, University of Hawaii
Daly, P. W. 2007, Natural Sciences Citations and References (Author-Year and Numerical Schemes), Version 8.1
de Vaucouleurs, G. 1964, in The Galaxy and the Magellanic Clouds, edited by F. J. Kerr (Dordrecht: Reidel), vol. 20 of IAU Symp., 195
Kerr, F. J. (ed.) 1964, The Galaxy and the Magellanic Clouds, vol. 20 of IAU Symp. (Dordrecht: Reidel)

ASTRONOMICAL SOCIETY OF THE PACIFIC



The Astronomical Society of the Pacific is an international, nonprofit, scientific, and educational organization. Some 130 years ago, on a chilly February evening in San Francisco, astronomers from Lick Observatory and members of the Pacific Coast Amateur Photographic Association—fresh from viewing the New Year’s Day total solar eclipse of 1889 a little to the north of the city—met to share pictures and experiences. Edward Holden, Lick’s first director, complimented the amateurs on their service to

science and proposed to continue the good fellowship through the founding of a Society “to advance the Science of Astronomy, and to diffuse information concerning it.” The Astronomical Society of the Pacific (ASP) was born.

The ASP’s purpose is to increase the understanding and appreciation of astronomy by engaging scientists, educators, enthusiasts, and the public to advance science and science literacy. The ASP has become the largest general astronomy society in the world, with members from over 70 nations.

The ASP’s professional astronomer members are a key component of the Society. Their desire to share with the public the rich rewards of their work permits the ASP to act as a bridge, explaining the mysteries of the universe. For these members, the ASP publishes the *Publications of the Astronomical Society of the Pacific (PASP)*, a well-respected monthly scientific journal. In 1988, Dr. Harold McNamara, the *PASP* editor at the time, founded the ASP Conference Series at Brigham Young University. The ASP Conference Series shares recent developments in astronomy and astrophysics with the professional astronomy community.

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