

# Author Instructions For the Preparation of Camera Ready Manuscripts

# Conference Proceedings

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#### INTRODUCTION

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#### ADDITIONAL HELP FOR PROCEEDINGS AUTHORS

- A sample paper is in the back of this Instruction booklet. It incorporates most features of a paper and you can see what it should look like for publishing in AIP Proceedings.
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#### **SPECIFICATIONS**

## **Stationery**

Use either standard letter size 8.5 x 11 inch paper (in North America) or the standard A4 210 x 296 mm paper. Print on *one side only* of good quality *white paper* using a laser printer with at least 300 dpi resolution.

#### **Format and Text Area**

The text area covered by your writing is prescribed here and has to be followed exactly, while the margins vary depending on the stationery used. The text area should be roughly in the center of the page. Adjust your margins accordingly.

For the trim size of the published book of 6% x 9¼ inches (162 x 235 mm) and the single column format,

# the text area will be 5-13/16 inches wide x 8% inches long, or 148 x 219 mm, or 35 x 52 picas.

It is important to follow the above specifications exactly when setting the margins. Pages will be reduced by 15% in the printing process. In order to help guide you with the specified text area, attached is an acetate overlay (with the dimensions ruled out) that you may put over your page to make sure the text fits in this ruled box exactly. If the type exceeds these guidelines or even comes short, the page length and/or width will need to be adjusted on your computer. You may have to compute the margin settings and test them to make sure the text area dimensions are followed exactly.

**Do not type page numbers on the manuscript.** To help keep pages in order, write page numbers on the bottom right hand corner outside the text area in light blue pencil. If possible, use a non-reproducible blue pencil. Do **not** leave extra space in the text area for the page numbers. AIP will strip them in below the last line of text on the page. Also, there will be no running heads on top of the page.

#### Fonts, Layout, and Other Specifications

**Fonts: Times Roman throughout**, 12 point size, for the body of the paper. For point sizes of various headings and other parts, see below.

**Spacing:** Single space. Check your system for handling superscripts and subscripts. If necessary, insert an extra half space to accommodate super- and subscripts.

Justification: Type should be fully justified; aligned left and right within the text area.

## Other Parts and Headings

- *Title of paper* 20 point size, **Bold, Cap/lower case**, centered. Place the title ½ inch (13 mm) below the top margin. Leave two blank spaces below the title line.
- *Author(s) of the paper* 14 point size, Cap/lower case, centered. Leave two blank spaces below the author names.
- Author Affiliations and Addresses 10 point size, italic, Cap/lower case, centered. Leave three blank lines below the author addresses.
- *Abstract* Indent two spaces from the left and right margins. Use 10 point size, fully justified. Leave two blank lines below the abstract.
- *Paragraph style* Indent first line three spaces; no extra line spacing between paragraphs.
- Figure captions Use 10 point size.
- Footnotes and References Use 10 point size.

#### • Headings

#### FIRST-LEVEL HEADING

Use 14 point size, bold, all caps, centered

#### **Second-Level Heading**

Use 14 point size, bold, cap/lower case, centered

#### Third-Level Heading

Use 14 point size, italic, cap/lower case, centered

To see an example of layout and specifications, see the sample paper in the back of these Instructions. "A picture may be worth 1000 words."

#### TITLE, AUTHORS, AFFILIATIONS

(For font sizes and layout, see above)

- Use the full title of the paper.
- Include all author names in full. Take care with spelling of coauthor names and initials.
- Show affiliations and **complete addresses**, including postal or zip codes. For more than one affiliation, relate each name to affiliation by use of superscripted symbol or letter (a, b)

#### **ABSTRACT**

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**There must be an abstract**, usually between 50 and 250 words long. All papers in AIP Proceedings are listed by various abstracting services and databases with complete abstracts. Begin the abstract with the word "**Abstract.**" followed by a period in bold font. Continue with normal font.

#### **BODY OF PAPER**

(Use 12 point font size for text)

Use headings and subheadings as needed. When making up pages, make sure to stay within the allowed area. Check with the overlay grid provided in these Instructions. Avoid large blank areas within the grid.

### **EQUATIONS**

Make your equations clear and legible, centered, with a space above and below. Equations should be the same point size as the text.

Place each equation on a separate line and number equations sequentially. Enclose the equation number in parentheses, and place it flush with the right-hand margin. Equation (1) is an example of a one-line equation.

$$\frac{d[F_1]}{d\omega_2} = SAm_2 \cos \omega, \quad \frac{d[F_1]}{d\omega_2} = SAm_3 \cos \omega. \tag{1}$$

Equation (2) shows how to format a two-line equation.

$$\frac{d^2 \xi}{dt^2} - 2n \frac{d\eta}{dt} = \frac{dV}{d\xi} n^2 \xi,$$

$$\frac{d^2 \eta}{dt^2} - 2n \frac{d\xi}{dt} = \frac{dV}{d\eta} n^2 \eta.$$
(2)

#### **TABLES**

Number tables in the text with arabic numerals. Give each table a concise title and define any abbreviations in footnotes to the table. Place tables at the top or bottom of the page, close to where they are first cited. Center the table in the width of the text area. **Fonts for the entire table are Times Roman, 10 point size**, including title and footnotes.

Table number and title are left-aligned above the table. Type the word "**TABLE 1.**" In bold caps followed by a period. The table title is normal font, caps and lower case.

#### **FIGURES**

Cite all figures in the text with arabic numerals by saying "Fig. 1" or Figure 1 for example. Place the figures as close as possible to their first mention in the text at the top or bottom of the page with the figure caption positioned below, all centered.

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Set *figure captions* in 10 point size, Times Roman font. Type the word "**FIGURE 1.**" in bold caps followed by a period. Each figure must include a caption which clearly and succinctly explains its content. Position the caption ¼ inch (6 mm) below the artwork. The caption should be the full width of the text area; if the caption runs shorter than the width, center the caption.

#### **FOOTNOTES**

Footnotes appear at the bottom of the page where they are cited by superscript numbers. Place a ½ point rule (line) 2 inches (50 mm) long above the footnote. Leave ¼ inch (6 mm) blank space above the rule and 1/8 inch (3mm) blank space below the rule. Set the footnote in 10 point size.

#### **ACKNOWLEDGMENTS**

Acknowledgments should be positioned at the end of the paper and before the reference section. Set the word "ACKNOWLEDGMENTS" as a first-level heading (14 point size, bold, all caps). The acknowledgments are in 12 point size.

#### REFERENCES

When referring to literature citations in the text, in square brackets [] show the arabic number in the order of appearance. In the reference section, set the word "**REFERENCES**" as a first-level heading (14 point size, bold, all caps). The references themselves are in 10 point size. Do not space between entries.

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Last name(s) and initial(s) of authors, *book title* (in italics), publisher, place of publication, year, chapter or inclusive page numbers.

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- 1. Austin, K., and Brown, M.P., *The New Physique*, publisher, London, 1997, pp.25-30.
- 2. Wang, R.T., "Title of the Paper," in *Classic Physiques*, edited by R.B. Hamil, publisher, New York, 1989, pp. 212-213.

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3. Brown, M.P., and Austin, K., *Appl. Phys. Letters* **65**, 2503-2504 (1994).

#### • For a paper presented at a conference and published in proceedings:

Last name(s) and initial(s) of authors, "Title of Paper," in *Title of Proceedings* (in italics), edited by editor name, publisher and series number, place of publication, year, inclusive page numbers.

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4. Smith, C. D., and Jones, E. F., "Load-Cycling in Cubic Press," in *Shock Compression in Condensed Matter-1997*, edited by S. C. Schmidt et al., AIP Conference Proceedings 429, New York, 1998, pp. 651-654.

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# For first page only, start title here Sailing Slow Solar Winds: New View from the Far Side of the Universe

Gary M. Larson\*, Georgios N. Ikaros<sup>†</sup>, John T. Ribald<sup>¶</sup>\*, and O. Susanne Hiquu<sup>¶</sup>

\*Laboratory for Astronomy and Solar Physics, NASA Goddard Space Flight Center, Greenbelt, MD 20771, USA

**Abstract.** Models of coronal mass ejection (CME) propagation and evolution in the solar wind, which range from simple one-dimensional fluid to three-dimensional MHD algorithms, continue to provide important insights into the dynamics of CMEs and are a valuable tool in the interpretation of interplanetary in situ observations. In this paper, we summarize and discuss the current state of knowledge with respect to these models. In particular, we highlight the structure of the ambient solar wind into which the CME propagates.

#### **INTRODUCTION**

A neutron monitor measures the flux of atmospheric neutrons in nuclear cascades initiated by primary cosmic rays with energies upwards of 1 GeV. At these energies, the typical effect of a coronal mass ejection (CME) is to suppress the intensity of ambient cosmic rays (of galactic origin) in the solar wind. This effect is called a "Forbush decrease."

Satellite measurements in the solar wind had already revealed that the interplanetary medium often exhibits disturbances in the form of transient shock waves, unusual plasma flows, and magnetic field variations [1]. Some of the post shock plasma flows showed high He<sup>2++</sup> fluxes, high magnetic field strengths, and smooth loop-like variations of the magnetic field direction.

## **Second Level Heading (Heading 2)**

Satellite measurements in the solar wind had already revealed that the interplanetary medium often exhibits disturbances in the form of transient shock waves, unusual plasma flows, and magnetic field variations [2]. Some of the post shock plasma flows showed high He<sup>2++</sup> fluxes, high magnetic field strengths, and smooth loop-like variations of the magnetic field direction. See Fig. 1.

<sup>†</sup>Department of Physics, National Technical University, GR-10101 Athens, Greece Department of Astronomy, Yale University, P.O. Box 208101, New Haven, CT 06520-8101, USA

<sup>&</sup>lt;sup>1</sup> This is an example of a footnote.

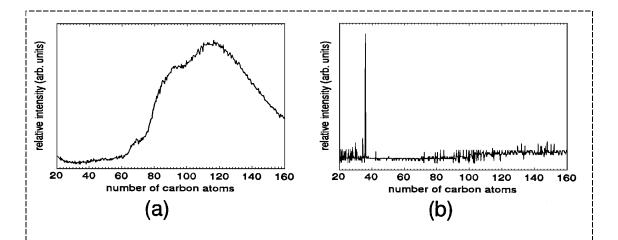
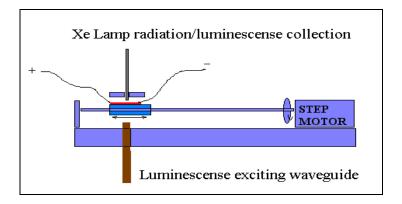


FIGURE 1. Mass spectrum for a) pure C<sub>36</sub> solid and b) K-doped C<sub>36</sub> solid.

Satellite measurements in the solar wind had already revealed that the interplanetary medium often exhibits disturbances in the form of transient shock waves, unusual plasma flows, and magnetic field variations [3]. Some of the post shock plasma flows showed high He<sup>2++</sup> fluxes, unusually low proton and electron signatures, high magnetic field strengths. Satellite measurements in the solar wind had already revealed that the inter-planetary medium often exhibits disturbances in the form of transient shock waves, unusual plasma flows, and magnetic field variations [4]. Satellite measurements in the solar wind had already revealed that the inter-planetary medium often exhibits disturbances in the form of transient shock waves. As shown in Fig. 2, some of the post shock plasma flows showed high He<sup>2++</sup> fluxes, unusually low proton and electron signatures, high magnetic field strengths, and smooth loop-like variations of the magnetic field direction and are summarized in Table 1.



**FIGURE 2.** If you have *color in your figures*, AIP can convert them to black/white for no extra cost. In that case, check your figures carefully for possible loss of information. Avoid reference to color in the figure caption. If you want the figures printed in color, check with AIP for the cost schedule. Upon publication of the Proceedings volume, AIP will send you an invoice. It will be cost effective to group color figures on a single page (front and back) as much as possible.

TABLE 1. This is an Example of a Table Caption.				
Column Header	Column Header	Column Header	Column Header	Column Header
Goes Here	Goes Here <sup>a</sup>	Goes Here	Goes Here	Goes Here
Row Name Here	X	X	X	X
Row Name Here	X	X	X	X
Row Name Here	X	X	X	X

<sup>&</sup>lt;sup>a</sup> This is an example of a table footnote.

#### Third Level Heading (Heading 3)

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Equation (1) is placed here as an example:

$$\frac{d[F_1]}{d\omega_2} = SAm_2 \cos \omega, \quad \frac{d[F_1]}{d\omega_3} = SAm_3 \cos \omega. \tag{1}$$

#### **ACKNOWLEDGMENTS**

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#### REFERENCES

- 1. Brown, M. P., and Austin, K., The New Physique, Publisher, London, 1997, pp. 25-30.
- 2. Brown, M. P., and Austin, K., Appl. Phys. Letters 65, 2503-2504 (1994).
- 3. Wang, R.T., "Title of Chapter," in *Classic Physiques*, edited by R. B. Hamil, Publisher, New York, 1997, pp. 212-213.
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