

Author Instructions

For the Preparation of

Camera Ready Manuscripts

Conference Proceedings

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February 2001

CONTENTS

Introduction		1
Additional H	elp for Proceedings Authors	1
Specification	S	2
Title, Author	s, Affiliations	4
Abstract		4
Body of Pape	r	4
Equations		4
Tables		5
Figures		5
Footnotes		6
Acknowledgr	nents	6
References		6
Copyright Tr	ansfer	7
Permissions .		7
Offprints/Rej	prints	8
Sample Pape	r	9
Check List fo	or Authors	12
Inserts:	Transparent Overlay Sheet Transfer of Copyright Form Permissions Request Form Offprint/Reprint Order Form	

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INTRODUCTION

Proceedings are not typeset. This is different from journal publications. AIP publishes the papers in the Proceedings as they are received. AIP does not copy edit for spelling, grammar, or clarity, although we check for more serious problems and may ask your volume editor for resolution. In other words, the *published paper will appear mostly as you submitted it*.

Proceedings papers are usually received by AIP as "camera-ready" hard copies as the primary document, which will be reproduced in the printing process. These Instructions will assist you to conform to the AIP style and format for Proceedings volumes. Even if you submit an *electronic file* as the primary document (by arrangement with your volume editor), the paper *must conform to these Instructions* when printed eventually.

For the submission of camera-ready hardcopies, you may use any word processor on any platform that you prefer, as long as the final output copy conforms to these AIP Instructions. *As a convenience*, AIP has made available on its webpage templates and style guides for manuscript preparation. AIP has a *template for MS Word 97* (PC platform only) and a *style guide in LaTeX*. They can be found on the AIP webpage: http://www.aip.org/catalog/publish.html

For the submission of electronic files additional questions of convertibility, compatibility, and embedded fonts and artwork arise. It will be necessary to first confer with your volume editor and possibly with AIP.

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- *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 printer with at least 600 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 $6\frac{3}{8} \times 9\frac{1}{4}$ 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 ¹/₂ 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

(For font size and layout, see above)

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.

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

Line art (figures with *solid* black and white areas) should be inserted into the camera-ready pages by printing along with text. This will allow you to see what the final product will look like, and to have nearly complete control over the quality of your work. Remember that the entire page will be reduced 15%; watch especially that the size of lettering on figures is not too small.

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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 ¹/₄ 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

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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

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• 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

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

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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.¹ 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 He²⁺⁺ 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 He²⁺⁺ fluxes, high magnetic field strengths, and smooth loop-like variations of the magnetic field direction. See Fig. 1.

¹ This is an example of a footnote.

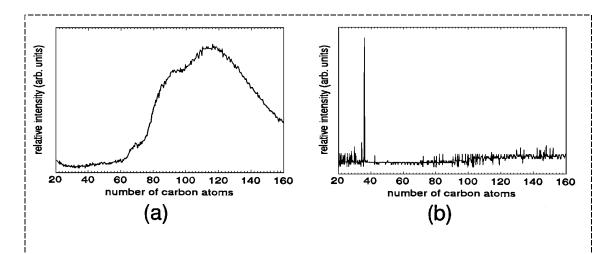


FIGURE 1. Mass spectrum for a) pure C₃₆ solid and b) K-doped C₃₆ solid.

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^{2++} 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^{2++} 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.

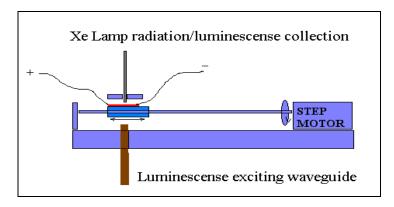


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TABLE 1. This is an Example of a Table Caption.							
Column Header Goes Here	Column Header Goes Here ^a	Column Header Goes Here	Column Header Goes Here	Column Header Goes Here			
Row Name Here	Х	Х	Х	Х			
Row Name Here	Х	Х	Х	Х			
Row Name Here	Х	Х	Х	Х			

^a This is an example of a table footnote.

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Equation (1) is placed here as an example:

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

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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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