

Preparation of Manuscripts for the 2011 IEEE Nuclear Science Symposium and Medical Imaging Conference

First A. Author, *Member, IEEE*, Second B. Author, *Fellow, OSA*, and Third C. Author, *Life Fellow, IEEE*

Abstract—These instructions provide guidelines for preparing manuscripts for submission to the Conference Record (CR) of the 2011 IEEE Nuclear Science Symposium and Medical Imaging Conference. If you are using L^AT_EX to prepare your manuscript, you may use this document as a template. Define all symbols used in the abstract. Do not cite references in the abstract.

I. INTRODUCTION

THIS document is an example of preparing your manuscript in L^AT_EX. It provides instructions for authors that will be presenting a paper at the 2011 IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS-MIC), and should be used in preparing and submitting manuscripts to the Conference Record (CR). The Conference Record is a non-refereed, DVD-based publication that is distributed to all conference attendees after the conference. All CR manuscripts will be made available online at <http://www.nss-mic.org/2011/ConferenceRecord> before the DVDs are mailed out. A detailed description of the CR submission procedure is provided in section II below. Submission of a manuscript to the CR is mandatory and an eight page limit is suggested.

Additionally, you may submit your manuscript to the IEEE Transactions on Nuclear Science (TNS), if it represents significant original contributions in the fields associated with the NSS-MIC (i.e., progress reports and preliminary findings are not appropriate). The TNS is a refereed publication, and is published throughout the year. There is no longer “Conference Issue” of TNS dedicated to the NSS-MIC, and therefore you can submit your manuscript to TNS at any time. For instructions on TNS manuscript submissions, please visit the IEEE’s on-line peer review system Manuscript CentralTM (<http://tns-ieee.manuscriptcentral.com/>). Please note that submission to

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Full names of authors are preferred in the author field, but are not required. Put a space between authors’ initials. Do not use all uppercase for authors’ surnames.

F. A. Author is with the National Institute of Standards and Technology, Boulder, CO 80303 USA (telephone: 303-497-3650, e-mail: author@boulder.nist.gov).

S. B. Author, Jr., was with Rice University, Houston, TX 77005 USA. He is now with the Department of Physics, Colorado State University, Ft. Collins, CO 80523 USA (telephone: 970-491-6206, e-mail: author@lamar.colostate.edu).

T. C. Author is with the Electrical Engineering Department, University of Colorado, Boulder, CO 80309 USA, on leave from the National Research Institute for Metals, Tsukuba, Japan (e-mail: author@nrim.go.jp).

TNS is a totally separate process from that of the Conference Record.

You can download this document, and the MS Word template, from the 2011 NSS-MIC conference web site at <http://www.nss-mic.org/2011/public/publications.html> so that you can use it to prepare your manuscript. For authors using word processors other than L^AT_EX or Word, please refer to the NSS-MIC11.DOC file for page layout guidelines.

II. PROCEDURE FOR MANUSCRIPT SUBMISSION

We are implementing a new manuscript submission process this year in order to ensure a timely distribution of the Conference Record DVDs. **The deadline for submission of your manuscript to the Conference Record is Nov. 15, 2011.** All questions regarding CR submission should be directed to Mokhtar Chmeissani, the Guest Editor, at mokhtar@ifae.es. Formatting and submission assistance will be provided at the conference by the Guest Editor.

A. Create IEEE Xplore-Compatible PDF File

All conference record manuscripts submitted to IEEE must be in Xplore-compatible[2] PDF format. To assist authors in meeting this requirement, IEEE has established a web based service called PDF eXpress. You can use this web service to convert your word processor files into Xplore-compatible PDF files, or to check if your own PDF file is Xplore-compatible. PDF eXpress converts the following file types to PDF: Microsoft Word, Rich Text Format (RTF), T_EX (dvi and all support files required), PageMaker, FrameMaker, Word Pro, QuarkXpress, and WordPerfect.

The PDF eXpress service will be available to the NSS-MIC authors between October 10 and November 15, 2011. To use this service, go to <http://www.pdf-express.org>. Enter **nssmic11x** as the Conference ID. If you are a first time user of this system, you need to set up an account. Once logged in, follow the instructions on the web site to upload your word processor file or PDF file. Shortly after your file is uploaded to the PDF eXpress, you will receive an email. If you uploaded a word processor file for conversion, the attachment in this email will be the converted Xplore-compatible PDF file. Save this file for the submission step outlined in section II-B below. If you uploaded a PDF file for checking, the email will show if your file passed or failed the check. If your PDF file failed the check, read the error report and fix the identified problem(s).

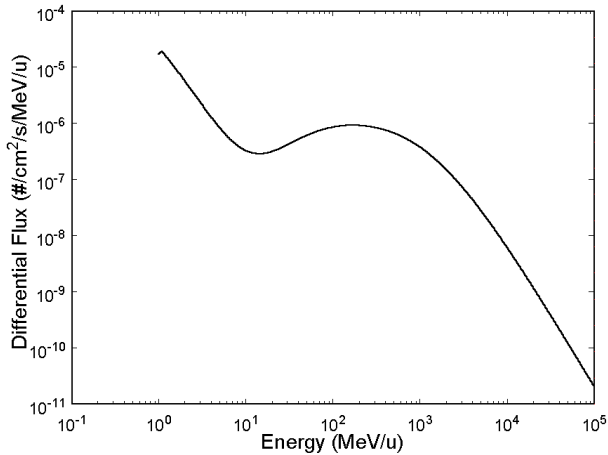


Fig. 1. Interplanetary galactic cosmic ray iron ion counts as a function of ion energy.

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A detailed description of the IEEE Xplore-compatible PDF requirement is available at http://www.ieee.org/portal/cms_docs/pubs/confstandards/pdfs/IEEE-PDF-SpecV401.pdf [2]. If you are using a Windows version of the Adobe Distiller to create PDF files, you can download a set of job option files (for Acrobat versions 5 through 8) from http://www.nss-mic.org/2011/publications/xplore_distiller_files.ZIP. Install and use the appropriate job option to create your own Xplore-compatible PDF files. If you are using other software to generate PDF files, please refer to their manuals for correct conversion settings. The most common problem in creating Xplore-compatible PDF files is not embedding all fonts.

B. Submit the Manuscript and Copyright Form

After you have obtained the Xplore-compatible PDF file, log on to the NSS-MIC conference web site (<http://www.nss-mic.org/2011>) using the username and password for your abstract submission. Go to the "My Submissions" link and check that your paper title and author list are consistent with those in your manuscript. Make appropriate changes using the "Update Abstract" button if needed. Click on the "Upload manuscript" button to transfer your PDF file. Your PDF file will be checked again for Xplore-compatibility. PDF files that fail the check will not be included in the Conference Record DVD.

An IEEE Copyright Form should be submitted electronically at the same time your Xplore-compatible manuscript is submitted. Click on the "Submit Copyright Form" button on the "My

Abstracts" link and follow the instructions. Each manuscript submitted to the Conference Record must be accompanied by a corresponding copyright form.

III. UNITS

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) English units may be used as secondary units (in parentheses). An exception is when English units are used as identifiers in trade, such as "3.5inch disk drive." Avoid combining SI and CGS units, such as mass in kilograms and volume in cubic centimeters. This often leads to confusion because equations may not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

IV. HELPFUL HINTS

A. Figures and Tables

Use the abbreviation "Fig." throughout the text of your manuscript, even at the beginning of a sentence, as well as in the figure captions. Do not abbreviate "Table."

Figure axis labels are often a source of confusion. Use words rather than symbols. As an example, write the quantity "Energy," or "Energy, E," not just "E." Put units in parentheses. Do not label axes only with units. As in Fig. 1, for example, write "Energy (MeV/u)" or "Energy (MeV·u⁻¹)," not just "MeV/u." Do not label axes with a ratio of quantities and units. For example, write "Temperature (K)," not "Temperature/K."

Multipliers can be especially confusing. Write "Dose (krd/s)" or "Dose (103 rd/s)." Do not write "Dose(rd/s)x1000" because the reader would not know whether an axis label of 16 meant 16000 rd/s or 0.016 rd/s. Figure labels should be legible, approximately 8 to 10 point type.

To provide consistent reproducibility, please include axes and tick marks on all four sides of your graphs and avoid the use of grid lines (note that grid lines tend to clutter a graph if dark or reproduce poorly if light). Please also include an explanatory legend within your graphs when two or more curves or sets of data are included. Avoid explaining the different symbols and curves in the figure caption alone - using a legend results in a much more easily understood figure.

B. References

Please note that the references at the end of this document are in the preferred referencing style. Give all authors names; do not use et al. unless there are six authors or more. Use a space after authors' initials. Papers that have not been published should be cited as unpublished. Papers that have been submitted for publication should be cited as submitted for publication. Papers that have been accepted for publication, but not yet specified for an issue should be cited as to be published. Please give affiliations and addresses for private communications. Capitalize only the first word in a paper title, except for proper nouns and element symbols. For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation.

C. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract. Abbreviations such as IEEE, SI, ac, and dc do not have to be defined. Abbreviations that incorporate periods should not have spaces: write "C.N.R.S.," not "C. N. R. S.:" Do not use abbreviations in the title unless they are unavoidable (for example, IEEE in the title of this article).

D. Equations

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. Punctuate equations when they are part of a sentence, as in

$$E = mc^2. \quad (1)$$

Be sure that the symbols in your equation have been defined before the equation appears or immediately following.

E. Other Recommendations

Use one space after periods and colons. Hyphenate complex modifiers: "zero-field-cooled magnetization." Avoid dangling participles, such as, "Using (1), the energy was calculated." Write instead, "The energy was calculated by using (1)," or "Using (1), we calculated the energy."

Use a zero before decimal points: "0.25," not ".25." Use "cm³," not "cc." Indicate sample dimensions as "0.1 cm x 0.2 cm," not "0.1x0.2 cm²." Do not mix complete spellings and abbreviations of units: use "J/cm²" or "fluence per square centimeter," not "fluence/cm²." When expressing a range of values, write "7 to 9," not "7-9" or "7 9," except for references [1]-[3].

Use the correct format for scientific notation in text, tables, and figures. Computer notation of "E" for "10" is not permitted. For example, numbers expressed as 6.02E-3, instead of 6.02x10⁻³, are not acceptable.

A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.) In American English, periods and commas are within quotation marks, like "this period." Other punctuation is "outside"!

If you wish, you may write in the first person singular or plural and use the active voice ("I observed that ..." or "We observed that ..." rather than "It was observed that ..."). If your native language is not English, please get a native English-speaking colleague to proofread your paper.

V. SOME COMMON MISTAKES

The word "data" is plural, not singular. The subscript for the permeability of vacuum μ_0 is zero, not a lowercase letter "o." Use the word "micrometer" instead of "micron." A graph within a graph is an "inset," not an "insert." The word "alternatively" is preferred to the word "alternately" (unless you really mean something that alternates). Do not use the

word "essentially" to mean "approximately" or "effectively." Be aware of the different meanings of the homophones "affect" and "effect," "complement" and "compliment," "discreet" and "discrete," "principal" and "principle." Do not confuse "imply" and "infer."

The prefix "non" is not a word; it should be joined to the word it modifies, usually without a hyphen. There is no period after the "et" in the Latin abbreviation "et al." The abbreviation "i.e." means "that is," and the abbreviation "e.g." means "for example." An excellent style manual and source of information for science writers is [3]. A general IEEE style guide, Information for Authors, is available at http://www.ieee.org/portal/cms_docs/pubs/transactions/auinfo03.pdf.

APPENDIX A

Appendices, if needed, appear before the acknowledgment.

ACKNOWLEDGMENT

The preferred spelling of the word "acknowledgment" in American English is without an "e" after the "g." Use the singular heading even if you have many acknowledgments. Avoid the expression, "One of us (S.B.A.) thanks ..." Instead, write "S.B.A. thanks ..." Put sponsor acknowledgments in the unnumbered footnote on the first page.

REFERENCES

- [1] H. Kopka and P. W. Daly, *A Guide to L^AT_EX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.
- [2] IEEE Content Engineering, *PDF Specification for IEEE Xplore*. Available: http://www.ieee.org/portal/cms_docs/pubs/confstandards/pdfs/IEEE-PDF-SpecV401.pdf.
- [3] M. Young, *The Technical Writer's Handbook*. Mill Valley, CA: University Science, 1989.