# **Information for PERC Proceedings Contributors**

## Introduction

The purpose of this document is to provide authors with the information they need to prepare their four-page two-column manuscript for submission to the PERC Proceedings. The Proceedings is the written record of the scholarly work presented at the annual Physics Education Research Conference. It provides a snapshot of the range of work presented at the conference. The Proceedings cover the full range of experimental and theoretical research on the teaching and learning of physics. The editors welcome submission not only of significant or final results, but also of preliminary research results and discussions of works in progress. Contributed papers go through a peer-review process prior to being accepted in the Proceedings. Invited papers go through copy-editing to ensure that they are clearly written and meet the Proceedings' style requirements.

All accepted peer reviewed papers will be published as they are received. Proceedings editors will not copy-edit or typeset papers. Therefore, it is **imperative** for authors to double, if not triple, check their papers carefully before they are submitted to ensure that they are readable and understandable by the general physics education research community.

## Special note on related contributed papers:

**Each** contributed paper that is submitted is reviewed and accepted on its own merit. Related papers are not able to be reviewed as a group and will not be accepted as a group. As a result, each paper must be able to stand on its own without the aid of reference to another paper that may also have been submitted for peer review as there is **no** guarantee that both papers will be deemed acceptable for publication.

## **General Instructions**

All manuscripts must be in English using correct grammar and style. Manuscripts can be created in either Microsoft Word or LaTeX but must be converted to PDF format for submission. The document size should be US letter  $(8.5" \times 11")$ . The entire document should be in Times New Roman font. A Word template and sample PDF are available. Manuscripts submitted for peer-review not meeting these requirements will be subject to immediate rejection.

# Special note for non-native English speakers:

It is **highly** recommended that a native English speaker proofread their manuscript **PRIOR** to submitting it to the Proceedings peer-review process. It is **not** the responsibility of the editors or the peer reviewers to extensively correct English grammar. Manuscripts that require extensive grammatical changes will not be accepted into the Proceedings.

Include the following material in the order shown:

- a. Title, with the first letter of each major word capitalized
- b. Authors' names
- c. Authors' affiliations, including complete postal address
- d. Abstract
- e. Keywords
- f. PACS codes
- g. Introduction
- h. Main body of text
- i. Conclusions
- j. Acknowledgments
- k. References in AIP style

More detailed information about each of these items will be discussed below.

#### Title

Titles are to be simple and concise and no more than 15 words in length. The first letter of each major word is to be capitalized. The use of nonstandard abbreviations and acronyms is not allowed. Unnecessary words (a, on, an, the, etc.) at the beginning of the title should be dropped.

## Authors' names

It is preferable to use only one form of your name as an author in all of your publications. The first author listed must be the person who is making the related presentation at the annual PERC. The first author of the paper is responsible for ensuring that all coauthors have approved the paper, are aware that they could be asked to participate in the peer review process and for checking that the form of each name (e.g., initials versus full names) is that normally used by the author. This is extremely important for searching and indexing the accepted papers.

If your name does not follow the European and American pattern of given name (e.g. Jane) followed by family name (e.g. Doe), please indicate how your name should be alphabetized in indexes by sending an e-mail to the current PERC Proceedings Editor.

#### **Authors' Affiliations**

Write out the names and postal addresses of all institutions in full. Include box numbers, apartment numbers, or street numbers only if necessary for effective mail delivery. ZIP codes are required for U.S. addresses. See sample paper for an example of how to deal with authors from multiple institutions.

#### **Abstract**

An abstract must accompany every paper. It should be a concise summary of the significant items in the paper, including the results and conclusions. In combination with the title, it must be an adequate indicator of the content of the paper. The abstract should consist of one paragraph and be completely self-contained. It should be about 5% of the length of the paper, but not more than 500 words.

The abstract cannot contain numbered references; incorporate such information into the abstract itself. Use this form:

Further information is available [A. B. Smith, Phys. Rev. A 26, 107 (1982)].

Displayed equations and tabular material are discouraged. Define all nonstandard symbols and abbreviations.

## **Keywords**

Keywords should describe the main topics of the research reported in the paper, with 3-8 keywords typically being sufficient. Very general terms are not necessary (e.g., "physics" or "astronomy"); keywords should instead describe specific topics and thus help someone searching for articles in these subject areas.

# **PACS** codes

PACS is a 4-level, hierarchical scheme for categorizing physics and astronomy research articles. More specific instructions and the scheme itself may be found at AIP's PACS website:

(http://www.aip.org/pacs/pacs/2010/individuals/pacs2010\_regular\_edition/index.html)

In general, follow these guidelines:

- 1. Choose no more than four index number codes.
- 2. Place your principal index code first.
- 3. Always choose the lowest-level code available.
- 4. Always include the check characters.

#### Introduction

Every paper should have at least a one or two paragraph introduction. The introduction serves to make the precise topic of the paper clear, indicates the scope of the coverage of the topic, the purpose of the paper, and a brief history of the topic as necessary. The reader should know what the point of view and emphasis of the paper will be and what you intend to accomplish with it.

## Main body of text

The body of the paper (text and math) should be divided into sections with the use of section headings and subheadings. In the body of the paper, all references, figures, and tables must be cited consecutively in numerical order.

Tables are numbered with roman numerals (I, II, III, etc.).

Figures use Arabic numerals (1, 2, 3, etc.) with (a), (b), (c), etc., to label the parts of figures. Note that parentheses are used to enclose the labels for parts of figures, e.g., Fig. 1(a).

References use Arabic numerals as superscripts (Jones¹). Superscript numbers are always placed after a comma, period, quotation marks, colon, and semicolon (Jones,¹ Jones,¹ Jones;¹ Jones;¹).

#### **Conclusions**

Typical functions of the conclusion of a paper include: 1) summing up, 2) statement of conclusions, 3) a statement of recommendations, and 4) a statement of future work. Any one or a combination of these may be appropriate depending on the subject of the paper.

# **Acknowledgments**

Limit acknowledgments to those who directly helped in the research itself or during discussions on the subject of the research. An acknowledgment to anonymous reviewers is discouraged. The acknowledgments should be no more than one paragraph in length with acknowledgment of financial support listed at the end.

# References in AIP style

All references should use the standard AIP style. See Reference Guide: AIP Style for additional details.

# **Proper reporting of statistics**

The American Psychological Association produces a publication manual that includes sections on how to properly report educational statistics.

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th Ed.). Washington, DC: APA.

The following websites have information on how to report statistics properly.

http://my.ilstu.edu/~jhkahn/apastats.html

http://www4.uwsp.edu/psych/cw/statistics/Wendorf-ReportingStatistics.pdf

http://www.psych.uw.edu/writingcenter/writingguides/pdf/stats.pdf

http://www.writingcenter.uconn.edu/pdf/Reporting\_Statistics.pdf