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Authors who are planning review or tutorial articles are encouraged to discuss their plans with the editors at an early stage.

Upon acknowledgment, a manuscript will be given an AJP Editorial Office *Manuscript Number*. Please use this number in all correspondence with the editorial office, and label any subsequent revisions with this number. If revisions are submitted during the editorial process, four complete copies should be supplied. Manuscripts will not normally be returned whether the paper is accepted or rejected. If a paper is accepted, we will, if necessary, request acceptable copies of the figures. At the time of acceptance, the author will also be sent a Transfer of Copyright form which must be returned to the American Institute of Physics in Woodbury, New York.

Authors are expected to carry out a thorough literature search before submitting manuscripts. Papers with clearly inadequate references will be returned without review.

**Form:** The manuscript should be typed or printed with a good quality printer, on one side of the paper only, double spaced (i.e., approximately 3 lines/in.), on  $8\frac{1}{2} \times 11$ -in. sheets, using type of standard size (approximately 10 characters/in.). Margins of about  $1\frac{1}{2}$ -in. width should be left on top, sides, and bottom. All manuscript pages should be *numbered*, including the title or abstract page and all end pages except figures.

**General Style:** The *Style Manual* of the American Institute of Physics, 4th ed., 1990, is available from American Institute of Physics. For ordering information, visit: <http://www.aip.org/epub/styman.html>. It contains further information on the preparation of manuscripts, including a list of standard abbreviations, correct rules of punctuation, spelling, choice of symbols, and suggestions on the arrangement and numbering of equations.

Every article in the "PAPERS" section of the Journal must be prefaced by an abstract. Abstracts are optional for contributions to the "Notes and Discussions" section.

Authors are expected to cooperate with the editors in wording their manuscripts in a manner consistent with the fact that groups such as physicists, students, and teachers include both women and men.

**Illustrations:** Illustrations published in the journal are scanned using a digital scanner and integrated with the text of the article, creating completely electronic pages. Please adhere to the following guidelines when preparing your illustrations for submission:

- **Number figures in the order in which they appear in text.** Label illustrations with their number, the name of the first author, and the journal on the **front** of the figure well outside the image area.
- **Place only one figure per page.** Place separate parts of the same figure on one sheet of white bond paper, spaced  $1/4$  in. apart, using a glue stick or wax on the back of the illustration and leaving a 2-in. bottom margin. Label all figure parts with (a), (b), etc. Make sure each figure is straight on the page. *Photocopies of artwork are not acceptable.*
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**Tables:** Tables should be typed on separate sheets at the end of the running text. They should be numbered consecutively with roman numerals. Each table should be provided with a brief title.

**Footnotes:** Footnotes should be typed double spaced and grouped together in sequence at the end of the manuscript. Footnotes should be numbered consecutively throughout the article, regardless of whether they are explanatory or literature references, except when they are appended to the author's name. In these exceptional cases, Latin letters are used. Explanatory footnotes may not themselves be footnoted. The *abstract* cannot contain footnote references.

Footnote references to periodical articles should have the following form, providing title and final as well as initial page numbers. Use of the issue number is encouraged but not required unless the reference would otherwise be ambiguous.

<sup>1</sup>Freeman J. Dyson, "Feynman's proof of the Maxwell equations," *Am. J. Phys.* **58**(3), 209-211 (1990).

A footnote reference to a book should have the form:

<sup>2</sup>David J. Griffiths, *Introduction to Electrodynamics* (Prentice-Hall, Englewood Cliffs, NJ, 1989), 2nd ed., pp. 331-334.

**Units:** Authors are encouraged to use SI units. Use of SI units is not mandatory, however, if other units are more appropriate.

**Equations:** Each important equation must have an equation number and should appear on a separate line, with the correct punctuation placed before and after it. The number of the equation, in parentheses, should be placed near the right-hand margin. Write  $E=mv^2/2$ ,  $a=dv/dt$ ,  $a=b/(c+d)$ ,  $a=\log(b/c)$ . Avoid bars either above or below letters; thus write  $v^{1/2}$ ,  $(ax+by)^{1/2}$ ,  $(v_{av}^2)^{1/2}$ . Avoid subscripts on subscripts, etc. Adequate space must be allowed for marking of inferior and superior letters or numbers. Crowded equations lead to errors in composition.

**Alterations in proof:** A limited number of alterations in proof are unavoidable, but the cost of making extensive corrections and changes after an article has been composed will be charged to the author. Final responsibility for correcting errors lies with the author.

Manuscripts should be sent to the Editor, *American Journal of Physics*, Box 2262, Amherst College, Amherst, Massachusetts 01002. (Submissions of Apparatus and Demonstration Notes or New Problems should be sent to the appropriate section editor.) Authors are requested to read the "Statement of Editorial Policy," *Am. J. Phys.* **66** (1), 9 (1998). Receipt of new manuscripts will be acknowledged to the principal author. (*Revised* manuscripts are not normally acknowledged.) We try to provide a further report to authors within 3 months of the date of receipt, but a longer delay is sometimes unavoidable. Correspondence concerning papers with more than one author should include the names of *all authors*, and the AJP editorial office *manuscript number*.

**E-mail:** [ajp@amherst.edu](mailto:ajp@amherst.edu). This address can be used for referee reports and correspondence. We do not accept manuscripts submitted electronically; manuscripts (and revisions) should be sent by ordinary mail (4 copies) to the editorial office.

**Reprints:** Authors will automatically receive a reprint order form with proofs of their manuscripts.

**Checklist:** Perusal of the following list will enable authors to avoid the most common problems with submitted manuscripts and will ease the work of the editorial office and of the compositor.

- (1) Send four copies of all material submitted.
- (2) The manuscript should be in type of standard size (10 characters/in.), double spaced (3 lines/in.), with ample margins.
- (3) References and other notes should be grouped together at the end of the manuscript and numbered consecutively. References should be given in the style illustrated above. Notice that the style of references for the *Ameri-*

*can Journal of Physics*, which includes *titles* and *final* as well as initial page numbers, differs from that used in many physics journals.

(4) Tables should be on separate pages, following the references.

(5) Each figure must have a brief caption; figure captions should be collected on a separate page, at the end of the text. Figure captions should not be on the figures themselves.

(6) Number all pages (except the actual figures) in sequence, including title, abstract, text, references, caption list, tables.

(7) Marginal notes are often helpful to enable the copy editor to identify correctly mathematical symbols, Greek letters, etc.

(8) The figures should be of quality appropriate for reproduction.

(9) A complete literature search must be carried out.