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Manuscripts may be **submitted** by a variety of electronic modes (including via e-print servers, direct Web upload, and email), or by conventional mail, but not by fax. Interactive **submission forms**, available on our Web server, are an integral part of the submission process for the e-print and Web modes, and are strongly recommended for email and conventional-mail submission. These forms aid authors in supplying all the information needed in a structured format which furthers efficient processing; they also provide a location for additional ''free form'' information. [For authors without Web browsers which support forms, noninteractive versions of the submission forms are available via ftp to aps.org in the /pub/jrnls directory as the sub_pre files (include filename suffix .asc, .tex, or .ps), or by request to the Editorial Office.]

Please specify the author to whom correspondence should be addressed, and give all available communications information for this individual (postal and email addresses, phone and fax numbers), since in various circumstances they may all be useful. Please specify journal and section to which the paper is submitted, and give PACS (Physics and Astronomy Classification Scheme) index categories if possible. (The scheme is available on our Web server, and also via ftp to aps.org as the file pacs_98.asc in the /pub/pacs directory.) If an important subject of your paper cannot be appropriately classified in the PACS scheme, please give an appropriate keyword or phrase, and indicate approximately where in the scheme this topic would be best placed.

A signed APS **copyright-transfer** form should be included with the submission, and will be required before publication. While the transfer of copyright takes effect only upon acceptance of the paper for publication in an APS journal, supplying the form initially can prevent unnecessary delays. The form appears at the end of the 1 September 1997 issue of *Physical Review Letters* and is available from the Editorial Office, on the World Wide Web via the URL http://publish.aps.org/ or via ftp to aps.org in the /pub/jrnls directory as the copy_trnsfr files (include filename suffix .asc, .ps, or .tex). Be sure to use the latest (3/94 or later) version of the form.

Manuscripts and figures are *not routinely returned* to authors. Authors should indicate (preferably on initial submission) if they want the manuscript and/or figures returned when correspondence is sent during the editorial process, and/or after a final decision has been made.

Electronic submissions may be formatted in REVTeX (preferred), LaTeX, Harvmac, or Plain TeX. The file must be in ASCII containing no control codes, with line lengths of 80 characters or less. All textual material of the paper (including tables, captions, etc.) should be in electronic form, as a single file. The file should produce double-spaced output. Properly prepared electronic submissions are eligible for a **publication-charge discount**, whether or not they also qualify for the compuscript-conversion production program. See paragraph beginning with ''compuscripts'' (below).

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Electronic-mail submissions (and inquiries about them) should be sent to the Internet address pretex@aps.org. For the initial submission, use as the subject ''submit'' followed by the three-letter abbreviation for the name of the journal (pre) and the last name of the first author; for example, ''submit pre jones'' or ''submit PRE Jones.'' Include the filled-out submission form (or the equivalent information, including journal, section, postal address, etc.) in the first part of the electronic-mail message. Receipt of an electronic-mail submission will be acknowledged within 24 hours. Copies of the manuscript should not be sent by regular mail (only original figures) unless the electronic transmission has not been successful.

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Manuscripts sent by **conventional mail** should be submitted in quadruplicate to the Editors, Physical Review, 1 Research Road, Box 9000, Ridge, NY 11961-9000. The manuscript, including the abstract, references, and captions, should be neatly printed in English, on good letter-size (e.g., $8\frac{1}{2}\times 11$ in. or A4) white paper with ample margins. (The first copy, used for production purposes if the paper is accepted for publication, must be printed on one side of the paper only; additional copies, used for review purposes, may be printed on both sides of the paper.) The type size and line spacing should be sufficient to accommodate editorial markings and should be legible to our keyboarders (no more than three lines per inch and no more than 88 characters per 6 inches). It should be carefully proofread by the author. Poor reproductions are unacceptable, as are unclear or excessive handwritten insertions.

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The **title** should be concise but informative enough to facilitate information retrieval. The **abstract** should be self-contained (contain no footnotes). It should be adequate as an index (giving all subjects, major and minor, about which new information is given) and as a summary (giving the conclu-

sions and all results of general interest in the article). It should be about 5% of the length of the article, but less than 500 words.

Notation should be clear, compact, and consistent with standard usage. Each symbol must be individually legible. **Equations** should be neatly typed or written in ink, punctuated and aligned to bring out their structure, and numbered on the right. (a) Diacritical marks (tildes, etc.) can be put over any symbol, including indices, but not over groups of symbols. (b) Three-vectors will be set in roman boldface type and should be marked in the manuscript with either a black wiggly underline or an arrow over the character. More general vectors, matrices, etc., are usually set in lightface italic type, although boldface may alternatively be used. (c) Any numerical fraction can be put on one line, e.g., $\frac{1}{2}a$. Use that form rather than $a/2$, and never use $1/2a$, unless you mean $1/(2a)$. The solidus should be used instead of built-up fractions in running text.

Marking of mathematical material: All unusual and handwritten symbols whose identity is not obvious should be identified in the margin the first time they appear, and thereafter only if any ambiguity is still possible. For example, when necessary, identify Greek letters (not including sum and product signs) and script letters; underline italic in black; underline in black three times for capital. Identify nonalphabetic symbols by their number in the *AIP Style Manual*. Superscripts are normally set directly over subscripts; authors should note where readability or the meaning requires a special order by specifically marking such cases (enclose superscripts in a black-penciled inverted caret; subscripts, in a black-penciled caret). Excessive marking should be avoided.

References and footnotes to text material must be combined in a single list, numbered consecutively in their order of first appearance in the paper, and placed in a double-spaced list at the end of the text material. They should be designated and cited in text by on-line Arabic numerals in square brackets. Footnotes within tables should be designated by lower-case letter superscripts and given at the end of the table.

For the proper form for references, see the *Physical Review Style and Notation Guide* and recent issues of this journal. The names of all authors of works cited should be given in the references, unless the number of authors is greater than three; in this case, the first author's name followed by *et al.* is allowed. When reference is made to internal reports or other items not available in the open literature, it is the responsibility of the author to provide sufficient information to enable the reader to obtain a copy of the referenced material. References to classified reports or other documents with restricted circulation should be avoided. It is important to confirm the accuracy of bibliographic information in references. This has become more important now that the journal is online. Hyperlinks will be programmed to enable readers to ''click'' on references and jump directly to the material cited. If your reference citations are incorrect or incomplete (e.g., missing author name, or an incorrect volume number or page), the associated hyperlinks may fail, and the usefulness of your paper in the online environment may be diminished. Since at the present time such links work only from the reference section, work cited anywhere in the paper, including in figure and table captions and in ''Note(s) added,'' should be included in the reference section.

Footnotes to an author's name or address should be limited to those useful for location of, or communication with, an author. Footnotes giving electronic addresses (e.g., email, fax, or Web) or a corresponding author are encouraged. All information concerning research support should appear in the acknowledgments.

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