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## PHYSICAL REVIEW LETTERS

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Title:

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The enclosed manuscript has been submitted to Physical Review Letters. The editors request your advice.

We would appreciate a response within one week of receipt. If you are not an appropriate referee, or if you are too busy, please ask a knowledgeable colleague to furnish a report, or suggest alternative referees; promptly notify us in any case. You may seek the advice of colleagues when preparing your report, but please remember that the paper has not yet been published and thus is privileged information.

Please provide a tactfully written report suitable for transmission to the authors, based on your consideration of the questions in the enclosed Advice to Referees. Please see the enclosed Referee Response Form for instructions on sending us your report. Please give reasons to support your recommendations. In some cases, you may wish to make remarks to us that would be inappropriate for forwarding to the authors; such remarks must be clearly identified and separate from your report.

We thank you in advance for your help.

**Re: Received**  
by

## REFEREE RESPONSE FORM

(Please include this form with your full report)

**Referee Please Note: This form is not a substitute for a full report**

This form is to assist the Editors and is not a substitute for your written report. It may be useful, however, as an outline for your report, which should explain why the paper does, or does not, meet our criteria.

**I. Letters published in PRL must meet a high standard of importance and interest.**

a) Please judge the importance of the paper to its specific field.

not important                        very important

b) Please judge the broad interest of the paper, apart from its importance to its specific field, to a wide spectrum of physicists.

not interesting                        very interesting

c) Please judge the validity of the paper.

probably not valid                        probably valid

**II. A Letter should have an introduction and conclusion that explains, in terms accessible to a broad audience, the physics context of the work: why it is important and what has been accomplished.**

Please judge the introduction and conclusion.

not accessible                        very accessible

**III. Recommendation:**

**NOTE: IF YOU ARE RECOMMENDING PUBLICATION IN PRL, PLEASE PROVIDE, IN YOUR REPORT, A SEPARATE STATEMENT AS TO WHY THIS PAPER IS APPROPRIATE SPECIFICALLY FOR PRL.**

- a) The paper should be published in PRL as it is.
- b) The paper should be published in PRL after minor revisions are made, without further review.
- c) The paper with revisions and further review, might be publishable in PRL.
- d) The paper with extensive revisions, and further review could possibly be published in PRL.
- e) The paper should not be published in PRL.

IV. Would you be willing to review the paper again?     yes     no

If not could you suggest alternative referees?

**V. Recommendation for Physical Review**

A recommendation to publish in Physical Review may be made, but should not be used to soften a rejection from PRL. It should be made separately, in a detailed statement to the Physical Review editor. Please take account of their publication criteria, which require that papers “significantly advance physics” and be “important to the field.”

The paper could be considered by the Physical Review as a

Rapid Communication	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Regular Article	<input type="checkbox"/>	with	<input type="checkbox"/>	no revision	<input type="checkbox"/>	
Brief Report	<input type="checkbox"/>		<input type="checkbox"/>	minor revision	<input type="checkbox"/>	
			<input type="checkbox"/>	major revision	<input type="checkbox"/>	

# REFEREE RESPONSE FORM

## Instructions

You may send your report by email (preferred) to `prl@aps.org`, fax, or conventional mail. If you use email, give as the subject “Report” followed by your last name in upper case, the manuscript code number, and the last name of the first author; for example, “Report BROWN LA1234 Smith”, and include in the message the responses to applicable questions on the form (an email-able template of the form and other information is available at <http://p<sub>r</sub>l.aps.org/referees.html>). If you do not receive an acknowledgment within one working day, please repeat the message or send the report via another mode. (For technical reasons, we cannot send automatic acknowledgments if the subject line contains “Re:”, “re:”, etc., so please avoid such subject lines.) If you use conventional mail or fax, please include the form. The manuscript should not be returned (except perhaps for pages you have marked for the benefit of the author). Do not automatically follow an email or fax report with a backup by conventional mail.

The form addressed to the editors is intended to assist them in reaching a timely decision on the disposition of the manuscript. *It is not a substitute for your report.* Your response on the form will not be returned to the authors. Answer only those questions which are applicable.

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### Explanatory notes:

1. The PRL acceptance criteria of scientific validity, special importance, and broad interest are described in the enclosed “Advice to Referees”.
2. Because PRL covers all of physics, our readers cannot be expected to understand the jargon of a particular subfield. Are the title, abstract, and introduction properly addressed to our general readership? If not, you may wish to include in your report some suggestions on how the authors might improve their manuscript.
3. If you do not recommend acceptance of the manuscript in its present form, and if further review is necessary, please indicate whether you are willing to review again. If not, please offer suggestions for alternate reviewers (preferably, more than one). (NOTE: This is usually only relevant after the first round of review, because the anonymous review process is normally restricted to two referrals.)
4. A recommendation to publish in Physical Review may be made, but should not be used to soften a rejection from PRL. Such a recommendation should be made separately, in a detailed statement to the Physical Review editor. If you make such a recommendation, please take account of the APS Council statement on publication criteria, requiring that papers “significantly advance physics” and be “important to the field.” A detailed description of the different sections of Physical Review (Rapid Communications, Regular Articles, Brief Reports) is enclosed.

## ADVICE TO REFEREES

*Physical Review Letters* aims to publish papers that keep broadly interested physicists well informed on vital current research. Papers are expected to satisfy criteria of **validity**, **importance**, and broad **interest**. We seek your guidance regarding how well this paper meets these criteria, as revealed by your answers to the questions which appear below.

Your assessment is particularly important with regard to scientific soundness. If you advise the editors that the paper is unacceptable for scientific reasons, it will not be published without further review. Your advice on the more subjective aspects is also requested. These aspects require a subjective judgment by you and a subjective editorial decision. Amplification of your point of view is therefore important. It is essential to cite references if the work is judged not new.

- **VALIDITY**

Is the work scientifically sound? If not, do you believe the paper can be revised to correct the scientific defects you find?

- **IMPORTANCE**

Does the manuscript report substantial research? Is the conclusion very important to the field to which it pertains? Is the research at the forefront of a rapidly changing field? Will the work have a significant impact on future research?

- **INTEREST**

Papers are of broad interest if they report a substantial advance in a subfield of physics or if they have significant implications across subfield boundaries. Is this paper of broad interest?

In some cases, the apparent importance and interest of a manuscript may be enhanced by stylistic revision. We welcome your suggestions and ask that you consider the following questions:

Is there an introduction which indicates, to the interested nonspecialist reader, the basic physics issues addressed, and the primary achievements? Is the research placed in the proper context, e.g., are the references appropriate and adequately discussed? Are assumptions clearly presented? Is unnecessary jargon avoided? Do the title and abstract stand alone? Are tables and figures, if any, well used and effectively presented?

The fundamental criteria for publication are validity, importance, and interest. Over the years, various statements of criteria have been published, and many of these retain value if they are regarded as secondary to the fundamental criteria. With that in mind, we ask that you consider the following remarks:

The focus of the journal is basic physics, and publishable Letters should conform to this emphasis. However, it is not our intent to exclude texts that might also contain important results in, for example, applied physics, biological physics, etc.

The journal does not accept marginal extensions of previously published work. For example, when the discovery of a new effect in one system is published, reports of similar explorations in other systems are usually considered inappropriate for the journal's pages, as are confirmations of previous results.

The journal declines publication of papers which appear to parcel research results into fragments for multiple publication.

We welcome speculative ideas provided that their consequences and ramifications have been sufficiently well considered and, to the extent possible, have been spelled out.

We hold the authors responsible for demonstrating adequate awareness of published prior research and for proper acknowledgment of colleagues. We invite the referees' comments on these issues, but we do not hold referees responsible for deficiencies, nor does the journal accept responsibility for them.

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## SHORT PAPERS IN PHYSICAL REVIEW

*Physical Review* publishes **Articles**, **Rapid Communications**, **Brief Reports**, and **Comments**. Except for **Articles**, these are limited in length. Editorial policy of the *Physical Review* is guided by the 1995 APS Council statement, which requires that all manuscripts significantly advance physics, be scientifically sound, be important to the field, and be in satisfactory form. Announcements of planned research and progress reports are not suitable for publication. A series of short papers by the same authors on a particular subject is discouraged in favor of a single comprehensive regular article.

A recommendation to publish in a section of the *Physical Review* should not be used to soften rejection as a **Letter**. Papers should independently satisfy the criteria for publication in the recommended section.

### Short Regular ARTICLES

**Articles** in the *Physical Review* may be short. However, if the material is unclear because of attempts to present it in a short format, a recommendation to rewrite the paper as a regular article of suitable length should be made.

### RAPID COMMUNICATIONS

**Rapid Communications** are intended for especially important results that deserve accelerated publication, and are therefore given priority in both the editorial and production process to minimize the time between receipt and publication. **Rapid Communications** are expected to meet the same standards as **Letters**, except that their interest and accessibility are directed at a specialized, rather than general, readership.

### BRIEF REPORTS

**Brief Reports** are short papers that provide accounts of completed research. The same standards of scientific quality apply as for other sections, but they do not warrant the priority handling given to **Rapid Communications**, and are inappropriate as regular articles. Addenda may be suitable as **Brief Reports**, provided they conform to the general publication criteria discussed above.