EDITORIAL POLICIES AND PRACTICES OF *PHYSICAL REVIEW B*

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Physical Review B is published by The American Physical Society, whose Council has the final responsibility for the journal. The APS Publications Oversight Committee and the Editor-in-Chief possess delegated responsibility for overall policy matters concerning all APS journals. The Editor of *Physical Review B,* who is appointed by the Council, is responsible for the scientific content and other editorial matters relating to the journal.

Editorial policy is guided by the following statement adopted in April, 1995 by the Council of the APS:

> It is the policy of The American Physical Society that the *Physical Review* accept for publication those manuscripts that significantly advance physics and have been found to be scientifically sound, important to the field, and in satisfactory form. The Society will implement this policy as fairly and efficiently as possible and without regard to national boundaries.

Physical Review B has an Editorial Board whose members are listed on the inside front cover of the journal. Board members are appointed for three-year terms upon recommendation of the Editor after consultation with the APS Division of Condensed Matter and the Division of Materials Physics. Board members play an important role in the editorial management of the journal. They advise on specific papers where special assistance is called for, and participate in the formal appeal process.

EDITORIAL GUIDELINES

If a manuscript submitted to *Physical Review B* is on a topic not within its purview, but may be suitable for another *Physical Review* journal, the Editors will transfer the paper to the appropriate journal and inform the author(s) of that transfer.

Papers must contain new results in physics. Confirmation of previously published results of unusual importance can be considered as new, as can significant null results. Papers advancing new theoretical views on fundamental principles or theories must contain convincing arguments that the new predictions and interpretations are distinguishable from existing knowledge, at least in principle, and do not contradict established experimental results. Mathematical and computational papers that do not have application to physics are generally not suitable for *Physical Review B.* In general, authors should keep review material to a minimum. Some review and reprise of past work is acceptable if the paper can be made more understandable and self-contained thereby.

Material previously published in preliminary form in a Letters journal, as a Rapid Communication, or in a conference proceedings can be the basis of a regular article in *Physical Review B,* provided the article presents considerably more results and details, enabling the reader to get a substantially improved understanding of the subject. Published conference proceedings are considered to be publications and material from them should not be submitted for publication to this journal except as noted above. Figures, tables, or text material that have been previously published should be referenced, not repeated. Exceptions can be made only when warranted by unusual circumstances.

Publication of ongoing work in a series of papers should be avoided. Instead, a single comprehensive article should be published. This policy against serial publication applies to Rapid Communications and Brief Reports as well as to regular articles.

Although there is no limit to the length of regular articles, the appropriate length depends on the information presented in the paper. Authors may refer in their paper to their own internal reports or theses that contain more detail than the published article or they may deposit some of the material, especially long tables, in the Physics Auxiliary Publication Service (PAPS) of the American Institute of Physics. The new electronic counterpart, EPAPS, is similar, and accommodates color-figure, multimedia, and program files. Information about (E)PAPS can be obtained from the Editorial Office on request, via ftp to aps.org in the /pub/jrnls directory as the file epaps_up.asc, or via the APS Research Journals home page at the World Wide Web URL http://publish.aps.org/.

New terminology should be introduced only when clearly needed. Excessive use of acronyms should be avoided. The proliferation of specialized jargon can serve to inhibit communication. New terminology should be appropriate and, if possible, convey to the reader an accurate impression of its meaning. It should not be frivolous, hard to pronounce, or based on a private joke. New terminology should not be introduced in titles. Justification for the introduction of new terminology should be provided on submission of the paper.

Authors should place their work in context with the current state of the field, but they are not held responsible for references to publications which had not yet appeared when their paper was submitted to *Physical Review B.* They are not responsible for references to e-prints, preprints, internal reports, or results which have been reported only orally at meetings (even though an abstract may have been published). If such work is called to the attention of the authors, they are encouraged but not required to refer to it. If revision of a manuscript takes a substantial time (several months), the references should be updated to include recently published relevant work. Authors are expected to include references to books and to published conference proceedings if they contain more than abstracts. To assist editors and referees in evaluating papers, authors should provide copies of any un-

published manuscripts or published preliminary versions of their own work that are relevant to the work under consideration.

Papers that describe proposed experiments fall into a special category. For such papers to be acceptable, the experiments must be demonstrated to be novel and feasible. It is the authors' responsibility to show that their proposal is likely to stimulate research that might not otherwise be undertaken.

It is the responsibility of the person submitting the paper to ensure that all persons listed as authors approve of the inclusion of their names.

EDITORIAL PROCEDURES

For nearly all manuscripts, the Editor selects one or two referees to review the paper. Authors are requested to justify the need for publication in *Physical Review B* in a submittal letter that can be forwarded to the referee(s). When referee reports seem inconclusive, the Editor may consult another referee(s). Additional referees are usually sent previous correspondence, but not the identities of previous referees. Referee reports are advisory to the Editor. As a matter of practice, reports of referees are generally transmitted by the Editor to the authors, but the Editor may withhold or edit these reports for cause. If in the judgment of the Editor a paper is clearly unsuitable for *Physical Review B,* it will be rejected without review; authors of such papers have the same right to appeal as do other authors. Special review procedures for Comments are described in the section concerning Short Papers.

If a manuscript is resubmitted, it is required that authors respond fully to the referee reports that have been sent to them by the Editor. Any resubmittal should be accompanied by a summary of the changes made, and a brief response to all recommendations and criticisms of the referee(s). This material will normally be forwarded to reviewers. If the authors wish to address some remarks solely to the editors, these should be clearly identified and separated from the summary and response.

As a matter of policy, it is the goal of the Editor to arrive at a decision on publication in as short a time as is practical. This allows papers that have been accepted to appear quickly and gives the authors of those papers that have not been accepted an opportunity to exercise other options with a minimum of delay. In practical terms, this means that a decision on the acceptability or otherwise of a paper can normally be expected after no more than two rounds of reviewing. Additional reviewing or initiation of the appeals process should be reserved only for exceptional situations: extended anonymous review cannot be used as a vehicle to develop an otherwise unacceptable paper into an acceptable one. To arrive at a final decision on a manuscript, the Editor may also consult an Editorial Board member. (Board members are generally informed of the identities of referees of papers on which they are consulted. See also the section on Author Appeals.)

Authors are encouraged to submit a list of experts whom they consider especially suited to review their paper. Such a list is particularly welcome when a manuscript treats a highly specialized subject. The Editor is, of course, not constrained to select a referee from that list. If there is a particular individual(s) that authors prefer not be chosen as a referee, they should so indicate and give reasons why. Although such requests are usually honored it is customary to give authors whose work is criticized in a manuscript an opportunity to respond to the criticism.

Authors may request that their identities not be revealed to the referees (''double-blind'' reviewing). If such a request is made, it is the authors' responsibility to furnish a copy of the manuscript without the authors' names, addresses, and acknowledgment section.

After acceptance of a manuscript, if further information that seems to warrant investigation is received by the Editor, it will be regarded as an obligation to reconsider the acceptance decision.

AUTHOR APPEALS

Authors may appeal a rejection of their paper by the Editor. In the case of a formal appeal, the paper and all relevant information, including the identities of the referees, will be sent to a member of the Editorial Board. The Board member may review the case on the existing record or may seek additional expert opinion. The Board member will present a signed advisory opinion to the Editor.

If a Board member has already provided a referee report on a paper prior to appeal, another Board member will review the paper on appeal. Authors may suggest those Board members they feel are appropriate (or not appropriate) to conduct the review, but the Editor is not bound by such suggestions. If there is no suitable Board member available, the Editor may appoint an appropriate scientist to consider a paper under appeal as an *ad hoc* Board member.

The author of a paper that has been rejected subsequent to an Editorial Board review may request that the case be reviewed by the Editor-in-Chief of the APS. This request should be addressed to the Editor, who will forward the entire file to the Editor-in-Chief. Such an appeal must be based on the fairness of the procedures followed, and must not be a request for another scientific review. The question to be answered in this review is: Did the paper receive a fair hearing?

RECEIPT DATES

Each paper, when published, carries a receipt date indicating when the manuscript was first received by the Editor of *Physical Review B.* If the authors make substantive changes

in a manuscript, the paper will also be given a ''revised manuscript received'' date. If the authors hold a manuscript an unusually long time after it has been returned to them with a referee's report, the original paper is considered withdrawn and the resubmitted manuscript is considered to be a new paper, with a new receipt date.

Papers transferred from *Physical Review Letters* or other *Physical Review* journals will be given a new received date, which is the date of transfer. However, a paper that is accepted without further review and has not been unduly delayed by the authors in submission to *Physical Review B* or by resubmitting it to the original journal may retain the original received date. Consideration will be given to a request that the original received date be retained.

AUTHOR INQUIRIES

The Author Status Inquiry System provides information to authors regarding the status of their manuscripts automatically via electronic mail or the World Wide Web. Information on Comments and Replies is not included. Authors may send an electronic mail message to status@aps.org using as the subject line the manuscript code number followed by the last name of the first author (for example, BC1234 Jones). The body of the message should be empty (no human will read it). Alternatively, the system may be accessed via the Web URL http://publish.aps.org/STATUS/status.html.

Telephone inquiries regarding status are discouraged, since the interruption of normal office procedures can cause delays. In those cases when clarification of the information from the Author Status Inquiry System is needed, send an electronic mail message to prb@aps.org (with subject line, for example, Status BC1234 Jones).

For papers that have been accepted for publication, information about their status in the production process can be obtained from AIP's Accepted Manuscript Status Inquiry System (AMSIS). You will need the accession code of your paper (called ''editor code'' on AMSIS) and the last name of one of the first three authors.

SHORT PAPERS

Physical Review B publishes, in addition to regular articles and errata, three types of short papers: Rapid Communications, Brief Reports, and Comments. The same standards of scientific quality apply as for regular articles. Each paper must have an abstract. Short papers are limited to 4 printed pages, although exceptions will be considered for Comments.

The **Rapid Communications** section is intended for the accelerated publication of important new results. Rapid Communications are given priority in editorial processing and production to minimize the time between receipt and publication. The submittal letter is normally forwarded to the referee(s), so it should be supplemented with an explanation of why priority handling is needed.

Page proofs of Rapid Communications are sent to authors, but, because of the rapid publication schedule, authors are requested to transmit corrections by FAX, electronic mail, or telephone within 24 hours of receipt.

A **Brief Report** is an account of completed research which meets the usual *Physical Review* standards of scientific quality but is not appropriate for a regular article (or for the priority handling given to Rapid Communications). Announcements of planned research, progress reports, and preliminary results are generally not suitable for publication as Brief Reports. The normal publication schedule is followed.

Comments are publications which criticize or correct specific papers of other authors previously published in *Physical Review B.* Each Comment should state clearly to which paper it refers. The normal publication schedule is followed.

The reviewing procedure for Comments is usually as follows:

(1) The paper is first sent to the authors whose work is being criticized. These authors may (a) act as reviewers (usually nonanonymously) and recommend that the paper be accepted, be accepted after revision, or be rejected; (b) submit a Reply for simultaneous consideration; or (c) reserve the right to respond following review by an independent referee. If they choose to review the paper they may or may not want to publish a Reply to the Comment. Authors should indicate their intentions to the editors as soon as possible.

(2) After the issues in question have been addressed by the authors of the Comment and the authors of the work being criticized, the Editor will usually consult an independent, anonymous referee. When the Editor is ready to accept a Comment to which no Reply has yet been submitted, the authors being criticized will be given the opportunity to prepare a Reply. The Reply will also be reviewed but may not be accepted for publication.

(3) After the Comment and Reply have been accepted for publication, the author of the Comment is sent a copy of the Reply for information, but should not alter the text of the Comment in proof. The Comment and Reply are usually (but not necessarily) published in the same issue.

Errata are notices of errors or omissions in papers previously published in *Physical Review B.* Errata should be as brief as possible. An Erratum should contain a short statement of the correction(s) and, where appropriate, a description of any effects on the conclusions of the paper.