PHYSICAL REVIEW D
EDITORIAL POLICIES AND PRACTICES
(Revised January 2006)

Physical Review D 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 Editors of *Physical Review D* are 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 D has an Editorial Board whose members are appointed for three-year terms upon recommendation of the Editors after consultation with the APS Divisions of Particles and Fields and of Astrophysics. Board members play an important role in the editorial management of the journal. They assist in selecting referees, in identifying new referees, in advising on specific papers where special assistance is called for, and by participating in the formal appeal process.

SUBJECT AREAS

Physical Review D1 generally covers experimental particle physics and phenomenologically oriented theory of particles and fields. *Physical Review D15* covers more formally oriented theory of particles and fields, gravitation, cosmology, and allied areas. (More detailed information follows.) Authors are welcome to indicate an issue preference for papers on borderline subject matter.

Physical Review D1 includes papers on subjects such as the following: experimental particle physics (and experiments in other areas of physics whose results are relevant to particles and fields); cosmic-ray physics; phenomenology of collisions; decays, masses, and other properties of particles; electroweak interactions; applications of quantum chromodynamics; development and application of more phenomenological approaches to strong interactions; development and application of specific realistic or semirealistic models beyond the standard model; other theoretical developments of phenomenological interest; lattice gauge theory.

Physical Review D15 includes papers on subjects such as the following: general relativity; supergravity; quantum theory of gravitation; cosmology; astrophysics relating to cosmology and particle physics; formal aspects of theory of particles and fields; general and formal developments in gauge field theories, including quantum chromodynamics, grand unified theories; string theory; quantum electrodynamics.

If a manuscript submitted to *Physical Review D* 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.

EDITORIAL GUIDELINES

The *Physical Review* and *Physical Review Letters* publish new results. Thus, prior publication of the same results will generally preclude consideration of a later paper. "Publication" in this context most commonly means "appearance in a peer-reviewed journal." In some areas of physics, however, e-prints are thought to be "published" in this sense. In general, though, any publication of equivalent results after a paper is submitted will not preclude consideration of the submitted paper.

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 a clear relationship to physics are generally not suitable for *Physical Review D*. 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 an abbreviated form (in a Letters journal, as a Rapid Communication, or in conference proceedings) may provide a useful basis for a more detailed article in the *Physical Review*. Such an article should present considerably more information and lead to a substantially improved understanding of the subject. Reproduction of figures, tables, and text material that have been published previously should be kept to a minimum and must be properly referenced. In order to reproduce figures, tables, etc., from another journal, authors must show that they have complied with the copyright requirements of the publisher of the other journal. Publication of material in a thesis does not preclude publication of appropriate parts of that material in the *Physical Review*.

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 Electronic Physics Auxiliary Publication Service (EPAPS) of the American Institute of Physics. Files deposited in EPAPS are made freely available via ftp and the World Wide Web. As an electronic service, EPAPS can accommodate color-figure, multimedia, and program files. Information about EPAPS is available via the Authors subpage of prd.aps.org, in the Manuscript Preparation section.

The proliferation of specialized jargon can serve to inhibit communication. Excessive use of acronyms should be avoided. New terminology should be introduced only when clearly needed. 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.

Readers benefit from complete referencing, which is necessary to place any work in the context of the current state of research. Authors should therefore make every effort to ensure that their citations of previously published work are comprehensive at the time of submission. This includes references to books and to published conference proceedings that contain more than abstracts. Authors should also add to the references any works published during the course of the review process.

It may also be necessary for authors to cite unpublished work, such as e-prints, preprints, internal reports, or results which have been reported only orally at meetings (even though an abstract may have been published). Unpublished work that appears during the review process may require citation as well. Unpublished work has not been fully vetted by the community, and considerable judgment on the part of the Editors will be employed in determining the need to cite such work.

Finally, to assist Editors and referees in evaluating papers, authors should provide copies of any unpublished 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. Generally not suitable for *Physical Review* are papers proposing a new experiment using straightforward calculations based on well-known theories or models, and papers describing simulations of apparatus or optimization or feasibility studies.

When a manuscript has several authors, one of them, the corresponding author, should be designated to receive and respond to correspondence from the Editors. This designation can be changed upon notification of the Editors. It is the responsibility of the corresponding author to represent all those involved with the work reported.

By submitting the manuscript, the corresponding author certifies:

- The paper represents original work of the listed authors.
- All of the authors made significant contributions to the concept, design, execution, or interpretation of the research study.
- All those who made significant contributions were offered the opportunity to be listed as authors.
- All of the listed authors are aware of and agree to the submission of this manuscript.
- The manuscript has not been published, is not being considered for publication elsewhere, and will not be submitted for publication elsewhere while it is under consideration for this journal.
- The authors accept the established procedures for selecting manuscripts for publication.

Authors may not present data and other results obtained by others as if they were their own. Nor may authors incorporate without attribution text from the works of another author, even when summarizing past results or background material. If a direct quotation is appropriate, the quotation should be clearly indicated as such and the original source should be properly cited. Papers that have been found to be in violation of this rule will be rejected. In such cases, resubmission of the manuscript, even with the plagiarized text removed, is not ordinarily allowed. However, the Editors may allow exceptions to this policy if warranted by special circumstances.

EDITORIAL PROCEDURES

For nearly all manuscripts, the Editors select one or two referees to review the paper, sometimes with advice from the Editorial Board. When referee reports seem inconclusive, the Editors 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 Editors, but are generally transmitted by the Editors to the authors, and so should be written in a collegial manner. The Editors may withhold or edit these reports for cause. If in the judgment of the

Editors a paper is clearly unsuitable for *Physical Review D*, 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 Editors. Any resubmittal should be accompanied by a summary of the changes made, and a brief response to all recommendations and criticisms. This material will normally be forwarded to reviewers, and so should be written in a collegial manner. Remarks that authors wish to address solely to the Editors should be clearly identified and separated from the summary and response. Authors should not send a version of the manuscript marked to show the changes, as this can lead to confusion and delay in processing.

As a matter of policy, it is the goal of the Editors 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 Editors 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 may 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 Editors are, 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.

We are no longer able to accede to requests from authors that we withhold their identities from the referees. Such "double-blind" reviewing has been discontinued.

After acceptance of a manuscript, if further information that seems to warrant investigation is received by the Editors, they will regard it as an obligation to reconsider their decision.

In some circumstances information about a manuscript considered by *Physical Review D* and subsequently submitted to another journal may be provided to the editor of that journal. Such information might include the comments and identities of referees.

AUTHOR APPEALS

Authors may appeal a rejection of their paper by the Editors. 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 an advisory opinion to the Editors, which will be sent to authors and/or referees with the Board member's name.

If a Board member has provided a referee report on a paper prior to appeal, another Board member must review the paper on appeal. Authors may suggest those Board members they feel are appropriate (or not appropriate) to conduct the review, but the Editors are not bound by such suggestions. If there is no suitable Board member available, the Editors 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? The decision of the Editor-in-Chief concludes the consideration of the manuscript by the American Physical Society.

RECEIPT DATES

Each paper, when published, carries a receipt date indicating when the manuscript was first received by the Editors of *Physical Review D*. 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 which are accepted without further review (and if the authors have not caused undue delays) will retain the original received date. In other cases a new received date, which

is the date of transfer, will generally be given. However, the authors may request that the original received date be retained.

AUTHOR INQUIRIES

The Author Status Inquiry System (ASIS) provides information to authors regarding the status of their manuscripts automatically via the World Wide Web at the URL `http://authors.aps.org/STATUS/`. 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 ASIS is needed, send an electronic mail message to prd@aps.org (with subject line, for example, Status DE1234 Jones).

For papers that have been accepted for publication and sent to production, information about their status in the production process is available via a similar service maintained by the production vendor. A link to this service is provided by ASIS for such papers.

SHORT PAPERS

Physical Review D publishes Articles, Rapid Communications, Brief Reports, and Comments. Except for Articles, these are limited in length. For information on how to estimate length, see the information available on the Authors subpage of http://prd.aps.org/. Each paper must have an abstract. 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; a comprehensive single regular article is preferred. Authors may follow a Rapid Communication with the subsequent submission of a longer version of the same work, but significant additional material must be included. Neither Articles nor Brief Reports should be followed by such expanded articles.

Articles in the *Physical Review* may be short; there is no minimum length limit.

Rapid Communications are intended for important new results which deserve accelerated publication, and are therefore given priority in editorial processing and production to minimize the time between receipt and publication. Rapid Communications are similar to *Physical Review Letters*; the principal difference is that Letters are accessible to a general audience of physicists and allied scientists, while Rapid Communications are primarily for a more specialized audience, the usual readers of *Physical Review D*. Rapid Communications in *Physical Review D* are limited to five journal pages.

Brief Reports are accounts of completed research which do not warrant regular Articles or the priority handling given to Rapid Communications; however, the same standards of scientific quality apply. (Addenda are included in Brief Reports.) Brief Reports are limited to four journal pages. The normal publication schedule is followed.

Comments are publications that criticize or correct specific papers of other authors previously published in *Physical Review D*. Each Comment should state clearly to which paper it refers and should not contain polemics. Comments are limited to four journal pages. 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 addressed. These authors may (a) act as identified reviewers and recommend that the paper be accepted, be accepted after revision, or be rejected; (b) submit a reply Comment for simultaneous consideration; or (c) reserve the right to respond following review by an independent referee.

(2) If the issues in question cannot be resolved between the authors of the Comment and the authors of the work being criticized, or if the Editors feel further advice is needed, an independent, anonymous referee will be consulted. If this referee recommends acceptance of the paper, then the authors on whose work the Comment is based are given the opportunity to write a Reply for possible simultaneous publication. This Reply will also be reviewed.

(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 published in the same issue, the Reply immediately following the Comment.

Errata are notices of errors or omissions in papers previously published in *Physical Review D*. 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.