AUTHOR GUIDELINES

ARTICLES

The vitality of physics as a discipline depends on a shared understanding as a framework for analyzing the physical world. *Reviews of Modern Physics* aims to provide this framework by publishing articles that review active areas of physics in a form that is useful to both practitioners and people entering the field.

Developing areas of physics certainly need reviews that are understandable to those outside the field, and accessibility is desirable in traditional areas as well. With this goal in mind, we ask that authors give considerable attention to the presentation of their material, making introductions accessible to intermediate graduate students and readers from other fields. The body of each paper should be economically and thoughtfully organized. Notation should follow the common physics conventions established in graduate-level textbooks, unless there are compelling reasons to do otherwise.

For the practitioner, the review presents the current status of a given topic. It provides a historical background and a literature survey, of course, but an ideal review is more than a catalog of work done. It is a critical distillation of the progress on the topic, identifying the most successful methods and pointing out areas for future development.

RMP tries to cover all of physics with a volume size of 1500 pages per year, and this requires us to impose a length limit on the articles. This is 50 journal pages or roughly 150 double-spaced manuscript pages. Exceptionally, we will consider longer reviews that will have unique reference value in the literature. An example is the review of fundamental constants that appeared in the January 2005 issue.

While most of our articles will be traditional scholarly reviews in the sense described above, we also seek outstanding tutorial articles stemming from topical schools in areas of advanced physics. Finally, we would like to keep RMP's tradition of publishing articles that provide a broad new framework for understanding the phenomena in a given field, as did the papers of Feynman, Bethe, and Fermi. We will be highly selective of such articles, however.

COLLOQUIA

The RMP Colloquia describe recent research of interest to a broad audience of physicists. Their aim is to do for the published literature what colloquia do for institutions and laboratories, that is, communicate to one's colleagues, including junior graduate students, research results at the frontier and offer new insights into concepts that link many different subfields of physics. Talks prepared for departmental colloquia or for invited presentations at workshops or conferences may serve as the basis for an RMP Colloquium.

Some guidelines for prospective authors are offered here:

- **Subject:** Your subject should be one in which recent progress has been noteworthy and which would be of interest to a broad audience of physicists. The introduction of your colloquium should make clear to readers why the subject should be of interest to nonspecialists.
- **Brevity:** Focus on a topic that can be absorbed readily in about 40 minutes and adequately summarized in about 10 printed RMP pages, or about 30 double-spaced manuscsript pages. (If you find that your chosen subject cannot be covered adequately within this compass, consider writing a longer article for RMP.) Manuscripts judged to have a length greater than 20 printed RMP pages will not be considered for publication.
- **Accessibility:** Discuss the topic in a way that is accessible to graduate students and nonspecialists. Authors must, therefore, aim for clarity and focus of presentation and avoid jargon and acronyms, defining any terms that might be unfamiliar to the nonspecialist.
- **Perspective:** Be sure that your Colloquium puts the described research in a broader perspective of the field. Colloquia are not expected to present a comprehensive review, but the introduction and references should place the subject in the context of related work
- **Editing:** Be prepared for the possibility that editing may be required to bring your article into line with the above-stated goals. In particular, note that each article is reviewed not only for technical content, adequacy of references, etc., but also for clarity and accessibility.