

Instructions for authors

Article categories

EPJ A publishes **Regular Articles**, which are original research papers that report results in the domain of Hadrons and Nuclei. Besides them, EPJ A publishes also Letters, Tools for Experiment and Theory/Scientific Notes and Reviews.

- **Letters/Letters to the Editor:** Letters must describe new and original work deserving rapid publication. Their aim is to concisely report on important theoretical, computational or experimental results or on sufficiently substantiated concepts, with a significant (potential) impact on the broader development in one of the fields covered by the journal. In order to allow a rapid refereeing and decision procedure and to better address a broad readership, Letters should not exceed 4 printed pages in EPJ A format, and should include no more than 4 figures and/or tables. Letters to the Editor are by invitation only and serve the purpose of initiating targeted, high-level discussions on open scientific issues, or on more speculative but truly innovative and promising ideas for the future development of the field. Their format style is similar to that of regular Letters. While external proposals for new, and comments on previously published Letters to the Editor are possible, the decision to act on them rests solely with the editors in charge of this section.
- **New Tools and Techniques:** are articles presenting original and new developments of particle detectors, readout electronics, computational methods, theoretical frameworks or analysis tools. An important subgroup are articles detailing specific aspects of importance to understand and assess either the formalism sketched in a theoretical resp. computational paper, or the analysis tools that lead to the physics results presented in experimental collaboration papers. Direct relevance to physics topics within the "Aims and Scopes" must be demonstrated. Technical details (including but not limited to construction drawings, electronic circuit diagrams or computer codes) may be added as electronic-only supplementary material.
- **Reviews:** are by invitation only through the Editorial Board. There is no general limit to the overall length—they may contain, but should not be restricted to, original work. Reviews will fall into one of the following categories: 1) Comprehensive reviews of major topics within the "Aims and Scope" of EPJ A and EPJ C. Their primary assets will be pedagogical exposition, synthesis of key developments, and the inclusion of a definitive and representative bibliography. 2) Technical papers presenting an extensive review of a specialist topic within the "Aims and Scope". 3) Reviews of a newly emerging field, providing an up-to-date synthesis and an extended discussion of the open questions. The discussion is expected to lead to an assessment of the possible further developments within the field, potentially making a substantial contribution to guiding decisions concerning the planning or running of experimental and observational facilities. 4) Outstanding thesis or working reports, the richness and importance of whose details justify the exceptional publication of the full length work.
- **Code Papers:** while EPJ A does not publish computer codes *per se*, it encourages the submission of papers where a computer code is an essential part of the described original work, provided the underlying physics is by itself of sufficient novelty and relevance to be considered for the journal. A further prerequisite is that the relevant code itself has already been deposited in a relevant DOI-minting repository, with enough details provided for its actual testing and benchmarking. The code must be clearly referenced in the submitted paper via DOI and any version numbering where applicable. Similarly, new versions of previously released code can only be considered if they

are directly connected to a similar, significant advance in the treatment of the underlying physics compared to the published literature. Referees appointed to assess relevant submissions will then be pointed to the code and be asked to perform tests of usability and reproducibility as part of the refereeing procedure. Any accepted paper will be considered as having documented sufficient evidence for the related code meeting its intended purposes in the general sense of refereeing and approving scientific material. In particular, clear instructions on how to download and install the program, as well as a simple use case, are expected to be provided both in the published source code (e.g., in a README file) and in the article. The L^AT_EX templates of EPJ A contain a section "Program Summary and Specifications" which must be activated to provide some very specific information about the code in the introductory section of the paper and to signal to the editorial board of the journal that some (novel) code is to be associated with the results presented.

- **Comments and Replies:** include discussion and commentary addressing significant aspects of the original paper but without a) representing essentially new papers, b) delving into too much detail, or c) becoming personal. They should address non-trivial aspects that will interest readers other than the authors of the comment and the original paper. They should not exceed two printed pages in the EPJ format and should not include an abstract.

The submission stage

Authors are asked to **submit** their paper **electronically** through the website:

<http://mc.manuscriptcentral.com/epja>

As "Main Document" **ONLY ONE of the following files: PS, DOC, PDF, IS REQUIRED** at this stage. Detailed instructions and on-line help (**User Tutorials** link) are available step by step, you simply should follow them carefully.

Exceptionally, for authors who do not have access to the web, we also accept a hard copy to be sent to:

EPJ A, Editorial and Production Office
Società Italiana di Fisica
Via Saragozza, 12, I-40123 Bologna, Italy

How to prepare a manuscript

There is no general limitation of the overall size nor of the number of figures, nor of the level of details considered to be necessary. However, the appropriate length of a manuscript depends on the information presented in the paper. A manuscript should consist of the following content.

Title

It should be simple, concise and informative with only the first word capitalized.

Author(s) name(s) and affiliation(s)

A list of all authors (with first and last name(s) written in full), as well as corresponding addresses, should be provided. Each address should be preceded by a numerical superscript corresponding to the same superscript after the name of the author concerned. Addresses should contain all information necessary for an effective mail delivery. E-mail should also be provided to speed up communication between readers and authors. This information will be published unless authors request otherwise.

Abstract

An abstract should accompany each manuscript; it should be completely self-consistent (e.g., with no figure, table, equation or reference citations), not exceeding 200 words and written as a single paragraph. Mathematical expressions should be avoided, if possible.

Main body of the paper

The body of the paper could be divided into sections. Sections should be numbered with arabic (not roman) numerals. Subsections (second level) should be numbered 1.2, 1.3, etc., and sub-subsections (third level) 1.1.1, 1.1.2, etc. Appendices should be numbered A, B, etc. All sections must have a short descriptive title, in which only the first word should be capitalized.

Equations, tables, figures, and references should follow a sequential numerical scheme in order to ensure a logical development of the subject matter. Standard copy-editing corrections are inserted by the Production Staff. For details, see the internationally agreed standards adopted by the International Union of Pure and Applied Physics (IUPAP) or defined by the International Organization of Standardization (ISO). However, sticking to the following main rules shall hasten the production procedure.

- Whichever spelling you choose (British or American English) please be consistent throughout.
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- Latin expressions, such as, e.g., *i.e.*, *et al.*, *versus* (*vs.*) should be set in italic.
- Chemical formulas, units of measure and acronyms should be set in roman.
- Mathematical symbols should be set in italic except differentials, standard mathematical functions (exp, log, sin, cos, ...), Im and Re for imaginary and real.
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There are 3 main types of footnotes: i) Introductory footnotes (referring to new addresses of authors, address of corresponding author, ...) indicated by superscript lower case letters. ii) Footnotes to text material, which should be kept to a minimum, and which should be designated by a numerical superscript: ¹, ², ³, etc. They should be placed at the foot of the relevant page. iii) Footnotes to tables, which should be indicated by superscript lower case letters and placed in a list immediately below the concerned table.

Acknowledgments and appendices

The acknowledgments section should follow the main body of the paper and should precede any appendix. Appendices, especially if more than one, should be labelled A, B, etc. (Appendix A or Appendix A. Complex developments, when there is a title). Equations in the appendices should be numbered consecutively, but separately from those in the main body of the paper (A.1), (A.2), etc. In each appendix equations should be numbered separately (B.1), (B.2), etc.

References

It is important to check the accuracy of bibliographic information in references. This has become more important with the on-line version. Hyperlinks will be programmed to enable readers to jump directly to

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1. J.M. Smith, R. Brown, C. Green, *Eur. Phys. J. A* **1**, 123 (2008).
 2. J.M. Smith *et al.*, *Z. Phys. A* **4**, 123 (1997).
 3. J.M. Smith *et al.*, to be published in *Nuovo Cimento B*.
 4. J.M. Smith, *Molecular Dynamics*, 2nd ed. (Springer, Berlin, Heidelberg, 1987).
 5. J.M. Smith, *Proceedings of the 9th GIFCO Conference, Lecce, 2000*, edited by S. Aiello, Vol. **68** (SIF, Bologna, 2000).
 6. J.M. Smith, DESY 98-123, 1998, unpublished.
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Research data policy

EPJ A strongly encourages that all datasets on which the conclusions of the paper rely should be available to readers and that the authors should provide a statement of data availability in their article, in which they describe where the relevant data can be found. Please click here for more details and information on recommended repositories.

The acceptance stage

The Editor-in-Chief will send an acceptance letter to the corresponding author and, at the same time, will ask for electronic files of the final text and figures to be sent to: epja.bologna@sif.it

Guidelines for submission after acceptance

Source (.tex, .doc, ...) files for the production plus a Postscript or PDF file corresponding to the final accepted version of your manuscript should be sent to the Editorial and Production office (even if your article had been previously submitted electronically).

File formats

Text

We would appreciate receiving articles prepared in \LaTeX 2_ε with the EPJ class. In this case, authors are requested to carefully follow the instructions detailed in the documentation and to adhere as much as possible to the rules given in the section **How to prepare a manuscript**. The macro package is available at www.epj.org.

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