

Guidelines for authors

submitting their papers to the
Proceedings of the Steklov Institute of Mathematics

April 11, 2024

1 General

Proceedings of the Steklov Institute of Mathematics is a periodical whose volumes are either thematic collections of papers pertaining to one or several related fields of mathematics or monographs. Each volume is prepared by specially invited guest editors, who select the papers and arrange the peer review process. The publication of each volume is sanctioned by the Academic Council of the Steklov Mathematical Institute.

The papers submitted directly to the Editorial Board are not dealt with and are not accepted for publication. The selection of papers for each volume is performed by a specially invited editor, who is, as a rule, a world renowned scientist specializing in those fields to which the volume is devoted.

Proceedings of the Steklov Institute of Mathematics publishes only **original** scientific papers that contain rigorous results in contemporary mathematics, theoretical and mathematical physics, mechanics, and their applications.

The papers submitted cannot be previously published in other journals, collections of papers, or special separate issues. Nor can they be submitted to other places for publication (except as a preprint). Most part of the submitted paper should present new material. Survey papers are also admitted.

The papers must be written in Russian or English (if neither of the authors speaks Russian or there is no technical possibility to submit an article in Russian, then the article may be presented only in English; in all the other cases, the presence of a Russian version is obligatory).

All papers are almost simultaneously published in the Russian version of the journal, *Trudy Matematicheskogo instituta im. V.A. Steklova RAN*, and in the English version of the journal, *Proceedings of the Steklov Institute of Mathematics*. The papers submitted only in Russian are translated into English. If a paper is submitted simultaneously in Russian and English, the two versions must be in complete agreement with each other (in particular, the order of authors in the title of the article should be the same in the Russian and English versions).

The authors receive once a pdf file of the Russian version and once a pdf file of the English version of the paper for proofreading, and also receive the final versions of the paper (pdf) after publication.

Important note. If there was a prepublication of the paper in the Internet, then the author, as soon as the paper is published in the journal, should indicate all data (journal number, year, pages, and DOI) of the paper in that prepublication.

2 Submission of materials to the Editorial Board

After the paper is approved by the volume editor(s) and (independent) peer-reviewer(s), the final tex and pdf files are sent (together with the report(s) of the peer-reviewer(s)) to the Editorial Board by the volume editor(s) (who also indicate the *dates of submission* of the paper in the original and revised forms). Simultaneously, the authors should submit the following materials to the Editorial Board:

- the final electronic version of the paper (tex and pdf files are obligatory) and all files used in preparing the electronic version (files with figures, all nonstandard style files, bbl files with reference lists automatically generated by BiBTeX, etc.). The files (tex and pdf) must match the files received from the volume editors; these files are further considered as the official final version of the paper;
- filled and signed **copyright transfer agreement** with the Steklov Institute for the publication of the Russian version of the paper in *Trudy MIAN* (available at <http://www.mathnet.ru/supplement/authoragreement/tm.zip>);
- filled and signed **copyright transfer agreement** with Pleiades Publishing for the publication of the English version of the paper in *Proceedings of the Steklov Institute of Mathematics* (also available at <http://www.mathnet.ru/supplement/authoragreement/tm.zip>);
- contact information of the corresponding author: name (and patronymic name), surname, phone number and e-mail.

3 Text format requirements

Papers should be submitted in any **TeX** format. Use a font size of **11pt** (preferable) or **12pt**. The text size should not exceed 165 mm by 233 mm. All pages must be numbered.

Each paper should contain:

- **key words** (in Russian if possible, and in English);
- **MSC index** according to <https://mathscinet.ams.org/msc>;
- **affiliations of all authors** (institute, university);
- **e-mails** of all authors;

- **short abstract** in one paragraph (in Russian if possible, and in English), without references to numbered equations, statements, or the list of references in the main body of the text (the abstract should be a self-contained text and be clear when published separately from the paper);
- acknowledgements of financial support, if necessary.

Acknowledgements (except for grants) should be placed at the end of the paper, before the list of references.

When citing other sources, indicate the relevant chapter or section but not the page number (since many sources have been translated into other languages and their translations have different page numbering). The paper must not contain references to unpublished (at least as preprints) papers. At most 10 references may be cited at once (in one phrase).

Repeating the same displayed formula or (theorem-like) statement with different numbers is not allowed.

Numbered parts of papers are sections, subsections and subsubsections. In sectioned papers, displayed equations should have double numbers.

Decimals should be rendered with a period, not with a comma (0.25, not 0,25).

Use only inverted commas for quotation marks (“...”), not double angle brackets.

Do not use Cyrillic letters in notation (even in subscripts).

All abbreviations used in an article, with the exception of those generally accepted, should be spelled out. The notation used in formulas, except for commonly known items, should be explained in the main body of the text.

4 References

The list of references should contain only those items that are mentioned in the main body of the text. If the paper is not a survey, the list of references should be of “reasonable” length (contain mainly publications related to the history of the issue or to directly related issues, as well as publications whose results are directly used in the text).

The list of references should be arranged in the alphabetic order (according to the author’s surnames in English; if they coincide, then earlier publications go first).

All references are given in the original language. Each item in the list of references should contain a reference to only one source.

References to books translated from English should be accompanied by complete references to the originals. References to papers in non-English-language journals should be accompanied by references to their English translations in all cases when such translations were made.

In the tex file, the authors’ initials should appear either everywhere after the authors’ (editors’) names or everywhere before them and be separated from them by spaces, but not separated by spaces from each other. For example: A.A. Ivanov, V.V. Petrov. (In the Russian version, the initials will automatically be placed everywhere after the surnames; in the English version, the initials will automatically be placed everywhere before the surnames)

and separated by spaces.) In the tex file, do not use “and” between the last two authors (it will be placed automatically by the style file of the journal).

References should contain the following information:

- for papers in journals — authors, title, journal name, volume, issue number, first and last pages, year, DOI (if applicable): A. S. Holevo, “Entanglement-assisted capacities of constrained quantum channels,” *Theory Probab. Appl.* **48** (2), 243–255 (2004) [transl. from *Teor. Veroyatn. Primen.* **48** (2), 359–374 (2003)], <https://doi.org/10.1137/S0040585X97980415>;
- for books — authors, title, publisher, city, year, volume, DOI (if applicable): I. P. Natanson, *Theory of Functions of a Real Variable* (Ungar, New York, 1955) [transl. from Russian (Nauka, Moscow, 1974)];
- for papers in collections or proceedings — authors, title, book title, publisher, city, year, volume, first and last pages, DOI (if applicable): A. Böttcher and H. Widom, “From Toeplitz eigenvalues through Green’s kernels to higher-order Wirtinger–Sobolev inequalities,” in *The Extended Field of Operator Theory* (Birkhäuser, Basel, 2007), *Oper. Theory Adv. Appl.* **171**, pp. 73–87, https://doi.org/10.1007/978-3-7643-7980-3_4.

References must be complete; in particular, they must contain all of the authors, regardless of their number, and the full name of the source.

5 Graphic files and photos

Figures (except photos and internal LaTeX graphics) should be prepared in vector formats and submitted in separate eps-, ps-, pdf- or svg-files. For the difference between vector and raster (bitmap) formats, see

http://en.wikipedia.org/wiki/Vector_graphics

http://en.wikipedia.org/wiki/Raster_graphics

It is possible to use any LaTeX graphics (tikz, pstricks, etc.) that produces vector pictures, i.e. almost any LaTeX graphics except the most primitive graphics given by `\begin{picture}... \end{picture}`. Instead of the primitive LaTeX graphics, please use the `pstricks` package (to this end, at the very beginning of the file, you need to add the line `\usepackage{pstricks}` and use the environment `pspicture` instead of `picture`, `\psline` instead of `\line`, `\pscircle` instead of `\circle`, etc.). For more details see <http://mirror.ctan.org/graphics/pstricks/base/doc/pstricks-doc.pdf>.

Color figures are allowed provided that everything remains clear after grayscaling and that no colors are mentioned in the text and figure captions.

The resolution of photos should be at least 600 dpi.

Photographs with inscriptions (explanations/notations) should be submitted in two versions, the first corresponding to the original with all inscriptions and notations; the second should be clean (no text, notations, etc.).

If illustrations are prepared in vector graphics editors (CorelDRAW, Adobe Illustrator, etc.), then the original format files (*.cdr, *.ai, etc.) should be submitted together with the eps/ps/pdf-files.

Inscriptions in illustrations should not come in contact with any of their parts.