

Instructions for preparing a volume for the Memoirs of the European Mathematical Society

1. The \LaTeX file

- Authors are expected to submit their manuscript in well-structured \LaTeX using the provided **template** and **style file**, and following the instructions given in these guidelines.
- Rename the provided `.tex` template file using, e.g., the surnames of authors.
- Insert the contents of your manuscript in the appropriate places; see the comments throughout the template.
- Do not include redundant source code such as unused definitions of macros.
- Do not use non-standard font families.
- Avoid using `\def` to define own macros.
- No personal style files should be used.
- Do not modify the page layout or style in any way. Also, do not attempt to fix page breaks and avoid adding or removing extra space to improve the appearance of the manuscript. This is done during typesetting.

2. The style file

- Include the style file as shown in the template.
- Do not edit the style file.
- The style file automatically loads the following packages:

```
amsthm, amsmath, amssymb, enumitem, geometry, caption, graphicx,  
array, hyperref, url, fontenc, inputenc, babel, booktabs, cite,  
float, footmisc, multicol, xcolor, newtxmath, newtxtext,  
kvoptions, nag, ragged2e, pdf14, pdftexcmds, xpatch, zref-base
```

These should not be loaded again.

3. Submitting your final manuscript

Once done with editing your manuscript, please provide us with

- the `.tex` file,
- the corresponding PDF file for reference,
- the `.bib` file (in case you use `BIBTEX`),
- all figures and illustrations in a standard graphics format along with their source files, e.g., SVG files or TikZ code, if available.

4. Title, abstract, author addresses, acknowledgments and funding, keywords and MSC codes

- The forntmatter will be prepared by the publisher, but for an easier identification of the work file you may like to add the title via the `\title{ }` field, and all authors in a single `\author{ }` field.
- Avoid very long titles, consider the option of a subtitle.
- The abstract should provide a brief but comprehensive and self-contained description of the book and its results. Since the abstract will also be printed on the back cover, try to keep it below ~ 1500 characters. Avoid using direct references to the bibliography like `'[5]'` since the abstract may appear independently from the rest of the book. For referencing works, use `'Petrinin (1998)'` or, if specifying the exact source is necessary, `'Petrinin [Geom. Funct. Anal. 8 (1998), 123–148]'`. Inline formulas such as $\Omega := \mathbb{R}^n \setminus \mathbb{R}^d$ can be used, but displayed formulas should be avoided.
- Acknowledgements should be included using the environment `ack` as in the template. Formal financial support (incl. grant numbers) should be listed next, using the `funding` environment.
- Please provide one primary, and several secondary MSC codes of five proper digits (do not use `XX`), as well as a few well-chosen keywords.

5. Sectioning

- Partition your text into chapters, sections, subsections, etc. as the content requires. You may also add appendices as needed.
- Do not let section counters take value zero.
- Use sentence case for section titles.

- Table of contents is required, index (after the bibliography) is recommended.

6. Figures

- Figures and illustrations should be sharp and of good quality, and their parts should be clearly discernible. Avoid very small or large symbols within figures as well as fuzzy or pixelated lines. Line widths should be at least 0.14pt and font sizes should be at least 5pt. Vector graphics formats (EPS, PDF) are strongly preferred to raster ones (JPEG, PNG).

- Include figures by writing

```
\begin{figure}[t]
  \includegraphics[width=.6\textwidth]{FILENAME}
  \caption{Caption text.}\label{LABEL}
\end{figure}
```

- For subcaptions, load `\usepackage[margin=0pt]{subfig}` in the preamble and then write

```
\begin{figure}[t]
  \subfloat[Caption a]{\includegraphics[width=4cm]{FILENAME}}
  \qqquad
  \subfloat[Caption b]{\includegraphics[width=4cm]{FILENAME}}
  \caption{Caption text.}
\end{figure}
```

7. Footnotes

- Limit the usage of footnotes to the necessary minimum.
- Do not use numbered equations in footnotes (rather promote them to proper Remarks).
- Avoid cross references to footnotes (use proper Remarks if you want to quote them).

8. Enumerated lists

- The labels of first level enumerations are by default (1), (2),
- You may change them to, e.g., (i), (ii), ... by using an optional argument:

```
\begin{enumerate}[(i)]
  \item ...
```

```
\item ...
\end{enumerate}
```

- For more options see the [documentation](#) of the `enumitem` package.

9. Theorems and the like

- For defining theorems and similar environments include appropriate `\newtheorem` commands such as

```
\theoremstyle{plain}
\newtheorem{theorem}[Theorem][section]
\newtheorem{lemma}[theorem]{Lemma}
\theoremstyle{definition}
\newtheorem{definition}[theorem]{Definition}
\newtheorem{example}[theorem]{Example}
\newtheorem{remark}[theorem]{Remark}
```

Do *not* use `\theoremstyle{remark}`.

- Depending on their amount, number theorem-like units within chapters or sections. Use the same counter for all theorem-like units, and do not allow for its value zero.
- For a proof, use `\begin{proof}... \end{proof}`. An end-of-proof symbol ‘■’ is added automatically.
- Use `\qedhere` to put the symbol ‘■’ at the end of an unnumbered displayed formula.

10. Displayed formulas

- For displayed formulas with more than one line use

```
\begin{align}...\end{align}
```

(or the starred form of `align` to skip numbering) instead of the `eqnarray` environment, since the former yields better spacing.

- For not numbering every line, add `\notag` at the end of lines where numbers should be skipped:

$$\begin{aligned} A &= f(x_i) = F'(x), \\ B &= g(x_i) = G'(x). \end{aligned} \tag{1}$$

- Write

`\begin{equation}\begin{aligned}...\end{aligned}\end{equation}`

to get one label for the complete block:

$$\begin{aligned}A &= f(x_i) = F'(x), \\ B &= g(x_i) = G'(x).\end{aligned}\tag{2}$$

- Other available environments for multiline displays are `gather` or `multline`.

11. More mathematics

- Avoid blank lines before or after displayed formulas, unless when starting a new paragraph.
- Avoid `$$...$$` and use instead `\begin{equation*}...\end{equation*}` or `\[...\]`.
- Only number equations which are quoted.
- For horizontal spacing in displayed formulas use `\quad` or `\qquad` (not multiple `~`).
- Leave punctuation marks *outside* inline formulas: `$n>0$`.
- Avoid forcing display style with `\displaystyle` or `\limits` for inline formulas.
- For the separator in set notation use `\mid` (not `|`), or `:` (not `\colon`).
- For the double bar indicating a norm use `\lVert` and `\rVert`. For inner products use `\langle`, `\rangle` (not `<`, `>`).
- Operators whose notation is more than one character should be upright. If the operator you need is not predefined (such as `\dim`, `\det` or `\sin`), write

`\DeclareMathOperator{\Aut}{Aut}`

- Sub- and superscripts that stand for words (such as ‘i’ for ‘initial’) and not for variables should be upright. Write `N^{i}`.
- Replacing omitted terms, use `\ldots` between commas, and `\cdots` between operation symbols (e.g., `+` signs).
- Avoid using `\left` and `\right`. To obtain bigger delimiters in displayed formulas, use `\big`, `\Big`, `\bigg` or `\Bigg`.
- Avoid using `\,` and `!`. A notable exception is before differentials like dx in integrals, where `\,` is normally added.
- Lower case set theoretic symbols (like `\cup`, `\cap`, etc.) are only to be used for binary operations. For a range, use their uppercase counterparts (`\bigcup`, `\bigcap`, etc.).

12. Grammar rules for displayed formulas

- Displayed formulas are considered part of grammatical sentences, and they follow the same punctuation rules. Example: A displayed formula that ends a sentence must end with a full stop. In such cases, avoid horizontal space before punctuation. Example: Do *not* write $\left[A_n < 1 \right], . \quad \backslash$
- Put a colon after phrases like ‘as follows’ or ‘the following’ when they introduce a displayed formula. Phrases like ‘defined by’, ‘can be seen that’, ‘such that’, ‘we have’ etc. must *not* be followed by a colon.

13. Emphasis

- Only use `\emph{ }` to emphasise text. Boldface fonts or coloured text are not supported.

14. Quotation marks, dashes, abbreviations

- For single and double quotation marks use ``...'` and ```...''`.
- The hyphen (code: `-`) is used for compound words like *p*-periodic. Do *not* write `$p-$periodic` which gives the minus sign instead.
- The en-dash (code: `--`) is used for number ranges and it can stand for ‘and’ as in Cauchy–Bunyakovsky–Schwarz.
- The em-dash (code: `---`) with no space before or after may be used to partition a sentence or for parenthetical clauses. For this, we prefer the en-dash with a blank space before and after.
- Write all Latin abbreviations upright (not italic): e.g., et al., i.e., etc.

15. Cross-references

- If you cross-reference a section, subsection, figure, table or theorem-like environment, always use `\label` and `\ref`. For displayed formulas, use `\label` and `\eqref`.
- Referring to (internal or external) theorems (or alike) by names, only capitalise the proper name part (e.g. Hahn–Banach theorem, Euclidean limit).

16. Bibliography

- Items in the bibliography should be ordered alphabetically using numerical labels.
- Each entry must be cited at least once in the text.
- Follow closely the different examples of bibliography entries given in our `.tex` template. They show the preferred style for books, articles (in journals and books), preprints, reports, and theses.
- Abbreviate titles of journals and book series as in [zbMath Open](#) or [Mathematical Reviews](#).
- We provide a `bst` file for authors who use `BIBTEX`.

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For questions regarding these guidelines, please contact us at production@ems.press.