

Editing Guidelines

Version 4.2 — January 2024

✓ = correct; ✗ = incorrect; ► = acceptable/preferred; C = L^AT_EX code

A ‘work’ means either an *article* (in a journal), a *chapter* (in a collected volume) or a *monograph*.

§1 General

§1.0.1 Always act in the interest of the reader and the author. “The most important consideration to bear in mind when editing is the Hippocratic oath: First, do no harm.” [AMS]

§1.0.2 Consistency. Language, notation, typography, and presentation are expected to be locally consistent throughout the work. Use common sense and in the case of doubts contact the publisher.

§1.0.3 Mark your changes. Correct obvious mistakes without further notice to the author.

To point out your ‘discuss-worthy’ or ‘critical’ modifications (i.e., the ones you are not 100% sure about), use a *colour* to mark your edit or add a *marginal note*. If the structure of a sentence is wrong and its meaning is completely unclear, do not rack your brain to figure out what the authors want to say, ask them. It is often the fastest and safest way.

Stick to the principle: More colour and notes to the author are better than less!

See also § 1.3 in [AMS].

§1.0.4 Rewriting. “The copy editor must never, ever impose his or her style on the author.” [AMS]

However, rewriting sentences is allowed, provided that the changes are marked (see § 1.0.3) so that the author gets the chance to verify them. The main reasons for such edits are to improve readability, line or page breaks, or to correct mistakes in both content and grammar.

Often it suffices to add ‘we have’, ‘Furthermore’, etc. The best collection of ready-made sentences and typical expressions is [Trzeciak].

The sentence ‘Since $a \in A$, $b \in A$.’ is correct (both \in act as verbs), but reason and consequence are hard to detect. If a paragraph contains too many of such sentences, possibly with longer formulas, then an alternative formulation should be considered.

§1.0.5 Resources.

[AMS] [AMS Style Guide \(Journals\)](#) by Mary Letourneau and Jennifer Wright Sharp.

[Trzeciak] [Writing Mathematical Papers in English](#) by Jerzy Trzeciak. Ask the production team for a complimentary copy.

[West] [The Grammar According to West](#) by Douglas West.

[Chicago] [The Chicago Manual of Style](#), 16th edition, The University of Chicago Press, Chicago, 2010.

[MW] [Merriam-Webster’s Collegiate Dictionary](#)

§1.0.6 Style files. Most journals use the style file `ems-journals.sty`, for others an adapted version `ems-journal-xxx` is provided, where `xxx` stands for the journal code.

Working with BibTeX, most journals use the bibliography style `ems.bst`, while other have their own versions.

§1.0.7 Use of the style file. All options of the `ems-journals` (or whichever) style package in the right column must remain in the source file, none of them is allowed to be moved to the `.sty` file.

Should you use your own (slightly modified) style file, please use a name beginning with `ems-journal`, followed by anything else.

```
C \usepackage[
  journal=XXX,
  openaccess,
  mode=online,
  lang=british,
  paper = default
]{ems-journal}
```

§1.0.8 Rendering engine. Compile the `.tex` file using `pdflatex`.

§2 Language

§2.1 Spelling and consistency

§2.1.1 Spellcheck. It is required to use a \LaTeX spell-checker. (Some \LaTeX editors such as WinEdt have built-in spell-checkers. Also [aspell](#) and [L^AT_EX](#) work well together with \LaTeX .)

Each work should be checked twice: before creating the galley proofs and after including the author corrections. The spelling in the bibliography must of course not be changed.

§2.1.2 Papercheck. It is required to use [Papercheck](#). It will help you to find typical errors and inconsistencies.

Papercheck just collects passages that *might* be wrong, so never correct anything that Papercheck reports without manually checking it first.

Papercheck: Found both spellings ‘pull back’ and ‘pullback’

Inconsistent? Not necessarily. ‘If we pull back the bundle, we get a pullback bundle.’

§2.1.3 Greek pairs. When the author uses two shapes of the same Greek letter, it is mostly intentional and correct. Nevertheless, it might be worth asking because occasionally the use of both variants happens accidentally.

For ϵ vs. ε , see [§4.5.5](#).

ϵ ε , θ ϑ , π ϖ , ρ ϱ , σ ς , ϕ φ

§2.1.4 American vs. British English. Authors may use either American English (analyze, neighbor, modeled, meter) or British English (analyse, neighbour, modelled, metre). Avoid mixed forms.

§2.1.5 Contractions. Avoid the use of contractions (‘it’s’, ‘can’t’, etc.), except for quotes and other sensible exceptions.

§2.1.6 non-xxx vs. nonxxx. Use either the hyphenated (‘non-xxx’) or the closed-up variant (‘nonxxx’) consistently in each work. Never write ‘non xxx’ (since ‘non’ is not a word but a prefix).

Mixed notation (e.g., ‘nonzero’ and ‘non-abelian’) is allowed in the same work, as long as each word has only one variant. It is a question of style and readability. Make sure that similar words (e.g., ‘nonnegative’ and ‘nonpositive’) are treated similarly.

Same with prefixes ‘semi’, ‘half’, ‘quasi’, and ‘pseudo’.

§2.1.7 Commas with i.e. and e.g. Put a comma/parenthesis/en-dash *before* and a comma *after* ‘i.e.’, ‘e.g.’, ‘that is’ (in the meaning of ‘i.e.’), and ‘for example’; see [§6.43](#) in [\[Chicago\]](#). Such changes do not need to be marked, but if the author’s English is very good, it is advisable to mention the change in a marginal note.

Authors with a high level of English are allowed to consistently follow a different rule (as there are differences between American and British English).

§2.1.8 **Which/That.** See §60 in [West].

It is usually advisable to keep the author's use of 'which' and 'that'.

'We have two functions that are differentiable.'
= Two (of possibly more than two) functions are differentiable.
'We have two functions, which are differentiable.'
= We have only two functions and both are differentiable.

§2.1.9 **Dimensional.** Write 'one-dimensional' (and 'two-', 'three-', 'finite-', etc.) with hyphen. There can be good reasons why there are both 'one-dimensional' and '1-dimensional' within one work. Despite this, check whether one should unify.

§2.1.10 **Well-known.** There is a difference in using 'well-known' and 'well known'. Similar with 'well-defined' vs. 'well defined' etc. Sometimes authors have strong preferences or a consistent writing style; in such cases this edit can be skipped.

✓ The well-known theorem is well known.

→ See §2.3.1 for more about compounds and hyphenation.

§2.1.11 **Word division.** L^AT_EX generally produces correct end-of-line breaks. If you have to intervene, use `\hyphenation` to specify hyphenation points.

For questions about end-of-line breaks, consult [MW] or other dictionaries. (The dots between syllables indicate the hyphenation points.)

Proper nouns, especially names, should not be divided.

Proper adjectives ending in 'ian' or 'ean' (if they cannot be avoided) should be divided right before this ending – even if [MW] says otherwise.

✗ Abe- ✓ Abel-
lian ian

C `\hyphenation{abel-ian brown-ian
euclid-ean euclid-ian gauss-ian
hermit-ian jacob-ian klein-ian
lorentz-ian noether-ian riemann-ian}`

§2.2 Capitalisation

§2.2.1 **Up vs. down style.** Each journal or book follows consistently either *down style*¹ or *up style*². For journals, the convention regarding the article titles is summarised in the table of §A.3, lower level titles – `\chapter`, `\section`, `\subsection`, `\paragraph`, etc. – always use down case. About book projects consult the Production Team.

§2.2.2 **Proper adjectives.** Proper adjectives may or may not be capitalised, as long as it is consistent. The author decides. (The bibliography is of course excluded.)

✓ abelian, noetherian, euclidean
✓ Abelian, Noetherian, Euclidean

→ See §4.2.2 for parenthetical text to theorems, and §9.3.2 for capitalisation of subtitles.

¹**Down style** (also known as *sentence case* or *sentence style*): Use lowercase letters except for the first word and any proper names. Example: 'On Laguerre–Hahn linear functionals: The symmetric companion' (note the uppercase 'The' as it is the first word of the subtitle)

²**Up style** (also known as *title case* or *headline style*): Capitalise the first word and all major words (nouns, pronouns, verbs, adjectives, adverbs and some conjunctions). Do *not* capitalise articles (the, a, an), conjunctions (and, or, but, ...) and prepositions (of, on, ...) unless they have 5 or more letters (About, Between).

Examples: 'On Restricted Sumsets in Abelian Groups of Odd Order'; 'Van der Waerden Numbers Known So Far'; 'Integer Partitions into Arithmetic Progressions with an Odd Common Difference'; 'On *k*-Imperfect Numbers'.

Two rules for *compound words*:

(1) Capitalise the second element of a compound.

(2) Two exceptions for Rule 1: Do not capitalise the second element of the compound if (a) it is an article, a preposition or a coordinating conjunction (and, but, for, or, nor); (b) the first element of the compound is a prefix or combining form (like anti-, pre-, etc.) that cannot stand by itself as a word *and* the second element is no proper noun or proper adjective.

Examples: 'A People-Oriented Approach for the Liouville-Type Equation'; 'Anti-feminism in Mathematics'; 'The Anti-Japanese Movement in Hawaii' (here 'Japanese' is a proper adjective); 'Take-off Time and Run-in Period'; 'Non-autonomous and Non-negative Systems' (because exception (b) applies for 'non')

- §2.2.3 **Colon in a title.** In titles, section titles, and subheadings capitalise the first word after a colon.
- §2.2.4 **References to numbered theorems and the like.** Capitalise the following words if they are part of a cross-reference (otherwise leave them in lowercase): chapter, section, figure, table, theorem, lemma, corollary, definition, etc.
- §2.2.5 **References to numbered formulas.** Cross-references to *formulas* are expected to be lowercased.

✓ This proves Theorem 1.3.
✓ This proves the theorem.

✓ See (2.5), equation (3.7) and inequality (3.8).

§2.3 Dashes and quotation marks

- §2.3.1 **Hyphen.** The hyphen is used for compound words. A brief hyphenation guide for compound words is §12.7.5 in [AMS].
A hyphen is also used between opposing terms ('versus'). If an author prefers to use an en-dash instead, that can be accepted as long as the en-dash is used consistently in all compound words indicating opposition.
- §2.3.2 **En-dash.** The en-dash is used for number ranges ('to') and between two author names ('and').
Attention: Double-barrelled names are written with hyphen.
Use the en-dash with a blank space on both sides to partition a sentence. Pay attention to mathematical expressions before or after the dash; in such cases, it is better to use a comma/semicolon/parentheses or to change the wording.
- §2.3.3 **Em-dash.** The em-dash with no space on either side is an alternative to the en-dash when partitioning a sentence. Authors using American English may choose this variant.
- §2.3.4 **Quotation marks.** It is up to the author to use either single or double quotation marks. Ensure they are used consistently.
If quotation marks are used inside another pair of quotation marks, use the other form.

✓ p -periodic, first-order equation
✗ p -periodic (a common mistake is to write \$p-\$)
✓ even-odd system, the final France-Poland match
✗ even-odd system, the final France-Poland match

✓ Cauchy–Bunyakovsky–Schwarz, pp. 23–29
✓ Colliot-Thélène, Harish-Chandra, Heath-Brown, Mittag-Leffler, Swinnerton-Dyer
✗ Function $f_n - n > 0$ – is continuous.

✗ "Here", the quotation marks are typeset *incorrectly*.
✓ She asked: "Didn't he say 'I like the left double quotation mark best' when I asked his glyph preferences?"
✓ She asked: 'Didn't he say "I like the left double quotation mark best" when I asked his glyph preferences?'

§2.4 Grammatical integration of formulas

- §2.4.1 **Punctuation.** Displayed formulas are unexceptional parts of a grammatical sentence. Thus, the same rules for punctuation hold, e.g., a displayed formula that ends a sentence must end with a full stop (or an ellipsis; see §3.2.4).
- §2.4.2 **Spacing.** There must be no extra horizontal space before any punctuation.
- §2.4.3 **Colon.** A sentence that precedes a displayed formula and contains a phrase like 'as follows' or 'the following' should end with a colon. Introductory sentences with 'we have', 'defined by', 'can be seen that', etc. must *not* end with a colon.
Leading sentences before theorems (and similar items) should be complete and preferably not end with a colon.

✗ $n > 1$. ✓ $n > 1$.

✗ We have the following
Theorem 1. The cardinality of ...
✗ We can prove the following:
Theorem 1. The cardinality of ...
✓ The following holds true.
Theorem 1. The cardinality of ...

§2.4.4 First word in a sentence. It is viewed as bad style to start a sentence with a mathematical expression or a reference number, especially when the preceding sentence ends with a symbol. (Of course there are exceptions.) Query the author for the proper fix.

- ✗ W^∞ is defined as the set of [...]
- ✓ The space W^∞ is defined as the set of [...]

§3 Typesetting

§3.1 Line and page breaks

§3.1.1 Line breaks. Pay attention to nice line breaks. It is not good style to start a line with a short symbol or reference number followed by a comma or period.

In most cases, it suffices to add a non-breaking space (~).

- ✗ The function is called f .
- ✗ It is proved in Theorem 3.1.

§3.1.2 Line distances. Even line distancing is preferred. The use of the suitable variant of `\smash`, `\smash[b]`, `\smash[t]` is supported, but extra care is expected to avoid subsequent lines colliding. If it helps, suggest some text edits during the proof correction phase.

- ✗ The values of $\int_0^\infty f(x) dx$ and $\overline{\int_0^\infty f(x) dx}$ may differ.
- ✗ The values of $\int_0^\infty f(x) dx$ and $\overline{\int_0^\infty f(x) dx}$ may differ.
- ✓ The values of $\int_0^\infty f(x) dx$ and $\overline{\int_0^\infty f(x) dx}$ may differ.

§3.1.3 Widows and orphans. Techniques for eliminating widows and orphans can be found at [Wikipedia](#).

§3.1.4 Ragged page flow. Our style files use `\raggedbottom` (contrary to `\flushbottom`). Thus, each page has the ‘natural’ height of the material on that page. In other words: the pages may have different baselines.

It is good style to make the pages of a *double page* roughly the same length.

§3.1.5 \displaybreak. Page breaks in multiline displayed formulas are allowed as long as there are at least two lines on each page. In addition, such page breaks must take into account the mathematical content (e.g., rather break the page right before a line starting with $=$ than before a \times line).

§3.1.6 Breaking section heads. Most (and in the future hopefully all) of our style files provide the commands `\titlebreak` and `\tocbreak`.

The first command forces a line break only in the actual section head and *not* in the table of contents. The second command behaves in exactly the opposite way.

```
C \section{Structure of the tube
algebra for a generalised
\titlebreakline Haagerup category
\tocbreak and restriction on the
size of whatever}
```

→ For ToCs in journal articles, see §9.3.8.

§3.2 Spacing

§3.2.1 French spacing. Our style files use ‘French spacing’: there is no difference between the spacing after a full stop and between words. It means you do not have to add `\` after full stops used in abbreviations/initials.

§3.2.2 Underfull/Overfull boxes. If the space between words is too big (*underfull hbox*), rephrase, e.g., by adding a word or, if possible and mathematically suitable, displaying a formula (see §1.0.4). These changes must definitely be marked (see §1.0.3).

There must also be no text hanging out past the margin (*overfull hbox*).

- §3.2.3 **Space vs. small space.** Use consistently either a (non-breaking) space (~) or a spatium (\,),
- (1) between initials (an exception is the bibliography),
 - (2) in ‘two-part references’,
 - (3) in page references,
 - (4) before units of measurement.
- §3.2.4 **Ellipsis.** (1) In the rare case that the ellipsis indicates an omission of *letters within a word*, there must be no space before the ellipsis.
- (2) In all other cases, a leading space before the ellipsis is required.
- (3) If the ellipsis is at the end of a sentence, add *no extra fourth dot*, but all other punctuation marks.
- §3.2.5 **No \noindent.** Our style files automatically produce correct and planned indentation. Do not use \noindent.
- §3.2.6 **Typical mistake.** Fix wrong spaces as in `It is called \emph{ clopen}`.

✓ R. S. Falk ✓ R. S. Falk
 ✓ Theorem 2.7 (i) ✓ Theorem 2.7 (i)
 ✓ [13, p. 79] ✓ [13, p. 79]
 ✓ 20 cm ✓ 20 cm

✓ Oh sh...!
 ✓ The ... brown fox jumps over ...; and if they have not died, they are still alive.
 ✓ The quick brown fox jumps over ... Did the fox really jump over ...?

§3.3 Upright, italic, bold

- §3.3.1 **Emphasis.** Use *italic* to emphasise words in upright text. Vice versa: use upright font for emphasis in italic text. (It is best to use \emph.)
- Do *not* use bold, bold-italic, slanted text or letter spacing for emphasis.
- For non-English terms, use consistently upright or italic (author’s choice).
- See §3.3.4 for exceptions.
- §3.3.2 **Bold symbols.** Heads of sections/paragraphs are usually bold (depending on the .sty file). Bold can also be used in algorithms, for column heads in tables, etc.
- Symbols in bold environments must be bold too.
- §3.3.3 **Parts of proofs.** Use italic fonts for titles of such parts (e.g., cases) but *not* bold. A nice result is obtained by \subparagraph.
- §3.3.4 **Abbreviations.** Commonly used Latin abbreviations and mathematical abbreviations must be upright.
- Abbreviations ‘w.r.t.’, ‘s.t.’, ‘w.l.o.g.’, ‘l.h.s.’, or ‘r.h.s.’ (or ‘LHS’, ‘RHS’) *inside* a formula can be kept. Outside of formulas, we prefer to spell them out.
- Other abbreviations such as ‘i.i.d.’ (independently and identically distributed) are very common and may be used without being spelled out on first appearance.
- Letters in ordinal numbers must be upright (even in italicised environments) and not appear as superscripts.
- See §4.5 for math.

✗ **clopen, clopen, clopen, clopen**
 ✓ A *clopen* set is both open and closed.
 ✓ ... which we know *a priori* is possible.

✗ **Planar C^1 -curves**
 ✓ **Planar C^1 -curves**

✓ et al., e.g., i.e., cf., resp., etc., a.e.

✓ $\{v \in V \mid \exists w \in W \text{ s.t. } d(v, w) = 1\}$
 ► with respect to, such that (subject to), without loss of generality, left-hand side, right-hand side
 ► i.i.d.

✗ *n-th* ✗ n^{th} ✓ *n-th* ✓ n^{th}

§3.4 Numbering

§3.4.1 General. In most cases, the numbering system as chosen by the authors (for sections, theorems, formulas, figures, tables, lists) can be retained as long as it is consistent. Sometimes it makes sense to suggest an alternative to the authors.

§3.4.2 Section numbering. Use Arabic section numbering (excluding zero) wherever possible. If the introduction does not contain items labelled by the section number, then an acceptable compromise may be that it is a non-numbered section.

Appendices are to be lettered alphabetically.

§3.4.3 Sections without title. Some authors insist on structuring their article with sections (mostly `\subsubsection`) that have no title but only their number. This construction is not provided in our style files. Leaving the title blank can result in incorrect spacing. In this case, contact the production team. (See [RSMUP/122](#) or, for a very special construction, [LEM/1022](#).)

→ See §5 for lists and §6 for cross-references.

✗ 0. Introduction

✗ Introduction

✓ 1. Introduction

✓ A. Fracture squares

✓ 2.4.1. Title. Default spacing.

✗ 2.4.1. Too much space after dot.

✗ 2.4.1 . Wrong space before dot.

§4 Mathematics

§4.1 General

§4.1.1 Most of our journals and books use the math font *MathTimeProfessional II* (mtpro2). It is highly recommended to read the [mtpro2 manual](#). You will find a lot of nice things such as bold math fonts in its Section 2.5 (instead of dangerous `bm` package), or `\wtilde`, `\what`, `\wcheck`, `\wbar`; see §4.5.4.

§4.1.2 Formulas in PDF bookmarks. If a chapter or section heading contains a formula, use `\texorpdfstring` in order to get a proper PDF bookmark.

See the example on the right. Note the leading backslashes and the `\string` command.

It is not necessary to have *proper* L^AT_EX code in the bookmarks, rather something that people familiar with L^AT_EX understand fast, i.e., some kind of ‘self-explaining pseudo-code’, not relying on user-defined commands or exotic packages.

✓ 3. The space H_{n-1}^μ is huge

```
C \section{The space
\texorpdfstring
{\math^{\mu}_{n-1}}}
{H\string^{\mu}_{n-1}}
is huge}
```

§4.1.3 Math in math mode. Ensure all mathematical expressions are typeset in math mode. In case of doubt whether a mathematical parameter, variable, symbol, etc. should be upright or italic, query the author.

✗ Let $p = 1 - q$ for all p .

§4.2 Theorems and proofs

§4.2.1 Format of theorems. Italic text body for theorems, lemmas, corollaries, etc.

Upright text body for definitions, remarks, etc.

Other theorem styles are not to be used.

✓ `\theoremstyle{plain}`

✓ `\theoremstyle{definition}`

✗ `\theoremstyle{remark}`

- §4.2.2 **Parenthetical text to theorems.** Names or references following a theorem heading are to be typeset using an optional argument. Always capitalise the first word of a name or title.
- `C \begin{theorem}[Main Theorem]`
`C \begin{theorem}[\cite{Theorem 4}{Serre:2021}]`
~~X~~ **Definition 2.1** (loops)
✓ **Definition 2.1** (Loops)
- §4.2.3 **New proof title.** When there is another numbered or unnumbered enunciation between, say, Theorem X and its proof, suggest the author to write ‘Proof of Theorem X’.
- ✓ **Theorem 3.1.** ...
Remark 3.2. ...
Proof of Theorem 3.1. ...
`C \begin{proof}[Proof of Theorem \ref{thm:X}]`
- §4.2.4 **QED box in theorems.** If ■ is needed at the end of a theorem (to indicate that the proof is not contained in the present work), use `\qed`.
If the theorem ends with a displayed formula, use `\tag*{\qedsymbol}`.
- See §5.0.6 for theorems starting with an enumerated or itemized list.
- §4.2.5 **Proofs ending with displayed material.** If a proof ends with a displayed formula, enumeration or itemisation, use `\qedhere` to prevent the box from being on its own line.
Avoid the ■ placed in an otherwise empty line. Ask the author’s help to add some text if necessary.

§4.3 Displayed formulas

- §4.3.1 **The [refcheck](#) package.** It is good style to remove unused (‘uncited’) formula tags, suggest it to the authors. To find those, use `\usepackage{refcheck}`. Remove the package after identifying all uncited formulas. Be careful with formula tags that are only *indirectly* referred to, such as (4.2) in ‘(4.1)–(4.3)’. Some authors insist that all formula tags from their manuscript are not changed (because they may have already cited the article in other works). Changes to the tags must therefore be communicated.
- §4.3.2 **No eqnarray, no \$\$, no empty line.** Do not use `eqnarray`. Use one of the many [alternatives](#). Do not use the `$$` environment. Remove empty lines in the L^AT_EX code before display math.
- Regular expression in WinEdt:
replace `\$\$\$\\(*\$\\)\$\\$`
with `\\\[\\0\\]`
- §4.3.3 **Breaking formulas.** When splitting a displayed formula over two lines, insert the break *before* `=`, `≥`, `+`, `×`, `,`, etc. Do *not* double the relation/operation symbol at the end of the first line. If a parenthetical expression needs to be broken into several lines, try to adjust to the mathematical content as much as possible. Good tools are proper line breaks and `\hphantom`.
- ~~X~~
$$A = B + C + \\ + D + E$$
✓
$$A = B + C + D + E$$
- ✓
$$\Phi = a + e^{i\varphi}(r_1 e^{i\alpha_1} + r_2 e^{i\alpha_2} + r_3 e^{i\alpha_3} + r_4 e^{i\alpha_4})$$
~~X~~
$$\Phi = a + e^{i\varphi}(r_1 e^{i\alpha_1} + r_2 e^{i\alpha_2} + r_3 e^{i\alpha_3} + r_4 e^{i\alpha_4})$$
- §4.3.4 **Indent.** `\quad` and `\qquad` are good choices for indenting lines in multiline formulas. Use them consistently within a work.
- ✓
$$I(s) \leq 1347 + A + B + C + D + E + F \quad \text{for all } s \in \mathbb{R}^+$$
- §4.3.5 **Horizontal space.** The standard horizontal space in displayed formulas is `\quad`. If a bigger space is needed, use `\qquad`.
- ✓
$$a_{i,j} = 3 \quad \text{for all } i > 1, j < 7$$

Note: Spatium `\,` before ‘ $j < 7$ ’.

§4.3.6 Merging displayed formulas. Two short and unnumbered displayed formulas which stand below each other in the author’s original manuscript can possibly be placed next to each other separated by ‘`\quad`’ or ‘`\quad\text{and}\quad`’.

§4.3.7 Avoid the word ‘and’ at the end of displayed formulas. Better use one of the following:

```
C \[ A \quad\text{and}\quad B \]
```

```
C \begin{align*} &A, \\ &B \end{align*}
```

```
C \[ A \] and \[ B \]
```

§4.3.8 One tag for several formulas. If two or more displayed formulas shall share the same tag, you may use the code shown on the right. The left curly bracket is optional.

N.B.: Most of our style files use the `amsmath` option `tbtag`s (‘top-or-bottom tags’), which places the formula tag in `split` equations with the *last* line. Since we require shared tags to be ‘in the middle’ (vertically centred), you have to use the `aligned` environment instead.

```
✓ \left\{ \begin{array}{l} A + B \leq C, \\ D \leq E + F. \end{array} \right. \quad (3.7)
```

```
C \begin{equation}\label{eq:1} \left\{ \begin{array}{l} \begin{aligned} & \\ & \dots \end{aligned} \end{array} \right. \end{equation}
```

§4.3.9 Cases. Punctuate each line of a `cases` environments.

In exceptional cases, when displayed math style is preferred, use `\usepackage{mathtools}` and its `dcases` environments.

```
✓ f(x) = \begin{cases} 1 & \text{if } x < 0, \\ 2 & \text{otherwise.} \end{cases}
```

§4.3.10 Multiline sets. When a set spans over two or more displayed lines, the two enclosing curly brackets should ideally only be in the first resp. last line (not spanning over all lines).

Since it is more important to break formulas logically than to follow any graphical rule, it is allowed to break sets differently.

```
✓ \{x \in X \mid \text{the vertical bar is pronounced as ‘such that’}\}
```

```
C \bigl\{x \in X \mid \begin{aligned} & \\ & \text{the vertical bar is pronounced as ‘such that’} \end{aligned} \bigr\}
```

§4.4 Parentheses and brackets

§4.4.1 Size of fences in inline formulas. In *inline formulas*, use normal-sized fences. Especially avoid `\big` fences; they are allowed only in exceptional cases (e.g., around inline 2×2 matrices).

parentheses (), brackets [], braces/curly bracket { }, angle brackets < >, single bars |, double bars ||

§4.4.2 Size of fences in displayed formulas. In *displayed formulas*, the size of fences should be at most as high as the embraced content. Automatically sized fences (`\left`, `\right`) are often too big and the space before and after is too wide; so avoid them.

Use the `l` and `r` version of `\big`, `\Big`, `\bigg`, `\Bigg`; see §4.4.3.

```
✗ \left( \sum_{\delta} g(\delta) \right)
```

```
✓ \left( \sum_{\delta} g(\delta) \right) ✓ \left( \sum_{\delta} g(\delta) \right)
```

Finding the appropriate size for fences is an art in itself. We refrain from lengthy explanations. Please try to typeset fences for similar expressions ‘consistently’ throughout the work. Although consistency is not all that trivial, the size of fences depends not only on the material they enclose, but also on the size of fences in the (visible) neighborhood, say, in the same paragraph. It is a challenge.

§4.4.3 Spacing around fences. In most cases, it is best to use `\bigl` and `\bigr` instead of `\big` (analogously for all other sizes) because `\big` can cause wrong spacing.

Sometimes this disadvantage turns into an advantage, e.g., if an opening fence precedes a sum symbol with limits.

```
✗ \big( \sum_{m=0} X_m \big) \Bigl(
```

```
✓ \bigl( \sum_{m=0} X_m \bigr) \Bigl(
```

§4.4.4 Unbalanced fences. It is a common error to unintentionally leave out opening or closing fences. Some \TeX editors have built-in tools for checking non-matching delimiters. The `check-parens` package can also help. Ask the author how to fix them or – if you are sure how to do it – whether your solution is correct.

§4.4.5 Norm. For the double bar use `\lVert` and `\rVert`.

✗ $||x||$ ✓ $\|x\|$

§4.4.6 Fancy fences.

✓ $\langle x \rangle$ **C** `\langle x \rangle` `\rangle` ✗ $< x >$
 ✓ $\langle\langle x \rangle\rangle$ **C** see Andrew Swann’s construction on [StackExchange](#)
 ✓ $\llbracket x \rrbracket$ **C** `\usepackage[only, llbracket, rrbracket]{stmaryrd}`

§4.5 More mathematics

§4.5.1 Inline is inline. Do not use `\displaystyle` and `\limits` for inline formulas.

§4.5.2 Punctuation marks. Leave punctuation marks *outside* inline formulas.

✗ $\$n>0,\$$ ✓ $\$n>0\$,$

§4.5.3 Ellipses. See the examples on the right.

If punctuation after an ellipsis is needed (see §3.2.4), add a spatium (`\,`).

The command `\dots` does a good job, but only if it stands in the middle of two relation or operation symbols: e.g., $\$1+2+\dots\$$ produces a *wrong* result.

✗ $1, \dots, n$ ✗ $1, \cdots, n$ ✗ $1, \ldots n$ ✗ $1 \ldots, n$ ✓ $1, \dots, n$
 ✗ $\{1, 2, \dots, \}$ ✓ $\{1, 2, \dots\}$
 ✓ $a = \cdots = z$ [`\cdots` also for $\leq, +, \times, \cup$, etc.]
 ✗ $a_1 \cdots \cdots a_n$ ✓ $a_1 \cdots a_n$ ✓ $a_1 \ldots \ldots a_n$
 ✓ For $n = 1, 2, \dots$, we have $a_n = 0$.

§4.5.4 Size of accents. With several single letters, the normal `\tilde` is a little small, while `\widetilde` produces a tilde that is too large. A good choice is the `mtpro2` command `\wtilde`.

You do not have to follow a rigid rule (such as ‘`\tilde` for lowercase, `\wtilde` for uppercase letters’) as long as the same length is used for each letter consistently throughout the work.

Same for `\what`, `\wbar` and `\wcheck`.

► \tilde{i}, \tilde{t} **C** `\tilde`
 ► $\tilde{A}, \tilde{B}, \tilde{M}, \tilde{a}, \tilde{b}, \tilde{c}, \tilde{f}, \tilde{\mu}$ **C** `\wtilde`
 ► $\widetilde{\mathbb{R}[X]}$ **C** `\widetilde`

§4.5.5 Greeks. Lowercase Greek characters are always italic.

Uppercase Greek characters are always upright.

In the rare cases where two shapes of uppercase Greek characters are needed – and only then – the `\var` variants may be used.

✓ $\alpha, \beta, \gamma, \tau$
 ✓ $\Lambda, \Sigma, \Phi, \Psi$
 ✓ $\Gamma \neq \Gamma$ **C** `\varGamma`

If only *one* shape of epsilon is needed, use ε (`\varepsilon`). In other words: ϵ (`\epsilon`) is only allowed if two glyphs are needed. (The shape of ϵ is too close to \in .)

For the other ‘Greek couples’ (see §2.1.3), we do not make any specifications.

§4.5.6 Operator names. Functions, classes, spaces, etc. with more than one letter are usually typeset upright. Use, e.g., `\operatorname`, not `\text`.

✓ $\sin, \det, \text{GL}(n, \mathbb{R})$

It is accepted typographical standard that abbreviated mathematical expressions standing for ‘words’ are also upright. Use `\mathrm`, `\mathsf` or some similar font family consistently.

✓ X_{fix}

§4.5.7	<p>Words in set notation. Words within sets of the form $\{\dots\}$ are preferred (especially in italic environments such as theorems) upright: use <code>\textup</code>.</p> <p>In most other expressions, words (such as ‘if’ and ‘otherwise’ in the <code>cases</code> environment) should be typeset using <code>\text</code>, so that they become italic when inside a theorem.</p>	<p>✗ $\{x \in X \mid f_m(x) \in X \text{ for all } m \text{ even}\}$</p> <p>✓ $\{x \in X \mid f_m(x) \in X \text{ for all } m \text{ even}\}$</p>
§4.5.8	<p>Fractions. Within a paper, be consistent about using horizontal or diagonal fraction strokes in similar situations. Avoid the use of <code>\nicefrac</code>.</p>	<p>✓ $\frac{1}{2}$ C <code>\frac{1}{2}</code></p> <p>✓ $1/2$ C <code>1/2</code></p> <p>✗ $1/2$ C <code>\nicefrac{1}{2}</code></p>
§4.5.9	<p>Left labels. A nice result is obtained by the <code>\prescript</code> command in the <code>mathtools</code> package.</p>	<p>✓ ${}_b^t X$</p> <p>C <code>\prescript{t}{b}X</code></p>
§4.5.10	<p>Upright vs. italic numbers. In italic environments, put numbers into math mode (\$) if and only if they are used ‘mathematically’.</p> <p>References created with <code>\ref</code> or <code>\cite</code> are upright by default.</p>	<p>✓ <i>In 1947, Taylor showed that 1947 is the only fixed point of f; see Theorem 4.4 and [13, Thm. 1].</i></p>
§4.5.11	<p>Horizontal spacing. <code>\,</code> and <code>\!</code> can usually be avoided. A notable exception is the differential, which <i>can</i> be preceded by a spatium (as long as it is done consistently), or adjacent delimiters in an interval formula.</p> <p>Be careful to use braces so that they do not accidentally change the default spacing.</p> <p>Sometimes braces are needed in the L^AT_EX code to ensure correct spacing.</p>	<p>✗ (A, B) ✗ (A, B) ✗ (A,B) ✓ (A, B)</p> <p>▶ $\int \varphi(x) \, dx$ ▶ $\int \varphi(x) dx$ ▶ $\int \varphi(x) dx$ ▶ $\int \varphi(x) dx$</p> <p>✗ $([0, t])$ ✓ $([0, t])$</p> <p>C <code>\newcommand{\n[1]{\textcolour{emsgreen}{\#1}}}</code></p> <p>✗ $a < b$ C <code>a \n< b</code></p> <p>✓ $a < b$ C <code>a \mathrel{\n<} b</code> ✓ $a < b$ C <code>\n{a < b}</code></p> <p>✗ $t \in]0, 1[$</p> <p>✓ $t \in]0, 1[$ C <code>t \in]0, 1[</code> or <code>t \in \mathopen]0, 1 \mathclose[</code></p>
§4.5.12	<p>Less than or equal to. Use \leq or \leqslant consistently. Same with \geq vs. \geqslant.</p>	
§4.5.13	<p>Set separator. Use the same set separator throughout the work. If the author prefers a vertical bar, use <code>\mid</code> not <code>\vert</code>; if the authors’ choice is colon then use <code>:</code> rather than <code>\colon</code>.</p>	<p>✓ $\{w \mid w \in W\}$ ✗ $\{w w \in W\}$</p> <p>✓ $\{w : w \in W\}$ ✓ $\{w; w \in W\}$</p>
§4.5.14	<p>Decimal separator. In English-language works, use a decimal point.</p>	<p>✗ $\frac{1}{2} = 0,5$ ✓ $\frac{1}{2} = 0.5$</p>
§4.5.15	<p>Thousands separator. In English-language works, use consistently a spatium or a comma.</p>	<p>✓ 200 000</p> <p>✓ 200,000 C <code>200\{, \}000</code></p>
§4.5.16	<p>Arrows. Long arrows can be used in displayed formulas, but should be avoided in inline formulas.</p> <p>Decorated arrows are best created using <code>\xrightarrow</code> etc.</p>	<p>✓ \rightarrow, \mapsto in inline formulas ✗ $\longrightarrow, \longmapsto$ in inline formulas</p> <p>✓ $x_n \xrightarrow[n \rightarrow \infty]{} x \xleftarrow[n \rightarrow \infty]{(3.2)} y_n$</p> <p>✓ $\mathcal{F} \xrightarrow{\sim} \mathcal{G}$ better than $\mathcal{F} \xrightarrow{\sim} \mathcal{G}$ C <code>\newcommand{\simto}{\xrightarrow{\smash{\raisebox{-2pt}{\mathsim}}}}</code></p>

§4.5.17 Double arrows. Proofs can be structured using ‘implication’ and other double arrows. Use a consistent style throughout.

✓ \Rightarrow ✓ $\Rightarrow.$ ✓ $\Rightarrow:$
 ✓ ‘ \Rightarrow ’ ✓ (\Rightarrow) ✓ etc.

§4.5.18 \bigcup . \bigcup is used for any ‘indexed’ union, while \cup is used for the binary operation (i.e. it always stands between two terms). Same with \bigcap vs. \cap , etc.

If you change such symbols, mark your edits (see §1.0.3).

✓
$$\bigcup_{i=1}^n A_i = A_1 \cup A_2 \cup \dots \cup A_n$$

§4.5.19 Bullet operator.

✓ $\alpha \bullet \eta \bullet_{\theta} \sigma$
C `\usepackage{scalereel}`
`\newcommand\bu{\mathbin{\ThisStyle{\vcenter{\hbox{\%`
`\scalebox{.7}{\SavedStyle\bullet}}}}}`

§4.5.20 Wide limits. It is highly recommended that `\mathclap` from the `mathtools` package is used *only if the subscript protrudes by at most one character on each side* of \sum , \int , etc.

This rule is a little vague because each character is different in width. Therefore, it is still a one-off decision and some intuition is required. So this is definitely not a rule, but a guideline.

For longer subscripts, `\substack` may help. If not, stick to the default spacing.

▶
$$\int_{\Lambda_1 \times \Lambda_2} x^2 dx$$
 C without `\mathclap`
 ▶
$$\int_{\Lambda_{\Phi_1}} x^2 dx$$
 C with `\mathclap`

§4.5.21 Binomial coefficients. You can typeset binomial coefficients using `\binom` or `\-` which often looks better – `\msbinom`.

✓ $\binom{n}{k}$ ✓ $\left(\begin{smallmatrix} n \\ k \end{smallmatrix}\right)$

§4.5.22 Transpose. To denote the transpose of a matrix use consistently either `\intercal`, `\top` or `\mathsf{T}`.

✗ $(\partial_1 \partial_2)^T$ ✗ $(\partial_1 \partial_2)^t$
 ✓ $(\partial_1 \partial_2)^\top$ ✓ $(\partial_1 \partial_2)^\mathsf{T}$ ✓ $(\partial_1 \partial_2)^\top$

§4.5.23 Average integral. For average integrals use either `\barint` or `\slashint` – ask the author.

▶ f, \bar{f}

Do not use the `esint` package or any ‘handmade’ symbol.

§4.5.24 Scriptscriptstyle. There is no size smaller than `scriptscriptstyle`.

In rare cases, the positioning of third-order indices leads to ambiguous results: In the first example on the right the red minus is too close to the other minus. Using `\vphantom` moves the minus further down. However, such cosmetic interventions should remain the exception.

✗ $\|w\|_{L_{\varepsilon_+ + \varepsilon_- - \alpha}}$
 ✓ $\|w\|_{L_{\varepsilon_+ + \varepsilon_- - \alpha}}$
C `\varepsilon_{\scriptscriptstyle -\vphantom{+}}`

§4.5.25 `xy` package. Commutative diagrams are often typeset using the `xy` package.

Load `xy` with the package option shown on the right. The arrow tips will then still differ from the tips of other arrows (\rightarrow), but that is the closest we can get.

C `\usepackage[all,cmtip]{xy}`
 ✓
$$\begin{array}{ccc} \pi_0(\mathbb{S}) & \xrightarrow{\sigma} & \pi_0(\mathbb{Z}) \\ \uparrow & & \uparrow \\ \mathcal{K}^W & \xrightarrow{\lambda} & \mathcal{K}^M \end{array}$$

§5 Lists

§5.0.1 Syntax. All our style files load the `enumitem` package; see its [documentation](#).

The most typical settings are shown on the right.

C `\begin{enumerate}[(i)]`
C `\begin{enumerate}[(i),widest*=2]`
can be used when the list consists of only (i) and (ii)
C `\begin{enumerate}[(1),widest*=10]`
when the list contains item (10)

- §5.0.2 Label format.** Labels should normally be upright, non-bold, and enclosed in a complete set of parentheses.
- | | | | |
|-------|-------|-------|-------|
| ✗ 1. | ✗ 1) | ✗ (i) | ✗ (a) |
| ✓ (1) | ✓ (i) | ✓ (a) | |

The choice of whether the counter is `\arabic`, `\roman`, `\Roman`, `\alph` or `\Alph` is up to the author. If you make changes here, inform the author and make sure that references to these labels are changed as well.

Avoid labels of the form 1., 2., especially when they are referenced. (Confusing: ‘It is bounded by 1.’)

- §5.0.3 Lists without indentation.** Indented lists are primarily used in theorems.

Outside of theorems, `enumerate` and `itemize` environments should be avoided if the lists are *too long*. This is often the case in proofs and remarks. There, it is better to put the labels at the beginning of a normal paragraph. For structuring proofs, one can also use, e.g., `\medskip` or `\subparagraph`.

- §5.0.4 Cross-references to lists.** When referring to an enumerated item, the reference must have the same format as the label. So if the label is ‘(3)’, the cross-reference must *not* be ‘3.’ Although they are not mandatory (see §6.0.1), it is best to use `\label` and `\ref`.

Ambiguity can arise when (1), (2) are used for both enumerated items and displayed formulas. In this case it makes sense to change the formula tags to (1.1), (1.2).

- §5.0.5 No double tag.** Do not use formulas which are at the same time displayed and a list item.
- | | | |
|-------|--------------|-------|
| ✗ (i) | $f(x) = e^x$ | (2.1) |
|-------|--------------|-------|

- §5.0.6 Theorems starting with a list.** If a theorem (or the like) immediately starts with an enumerated or itemized list, ask the author to provide some introductory text, such as ‘The following statements/assertions hold.’

If the author insists on not having such an introductory text, then the first list item must start in the *first* line (where the word ‘Theorem’ stands).

If a *labelled* theorem starts with a list, add `\phantomsection`; otherwise you would get the pdfTeX warning ‘[...] has been referenced but does not exist’ and references to this theorem would lead to page 1.³

```
C \begin{theorem}
    \begin{enumerate}

C \begin{theorem}%
    \phantomsection\label{thm:1}
    \begin{enumerate}
```

- §5.0.7 Capitalisation and punctuation.** Use capitalisation and punctuation of items within a list consistently.

- §5.0.8 Displayed formulas in list items.** The available width for a displayed formula equals the available width of the surrounding text, i.e., in a list, there is less space for a displayed formula than in a normal paragraph. This behavior should only be changed with a good reason.

If, after consultation with the publisher, an exception appears necessary, apply [Heiko Oberdiek’s construction](#). It gives the full text width to *all* displayed formulas in the work.

§6 Cross-references

- §6.0.1 \ref and \eqref.** For cross-references to a section, subsection, figure, table, or theorem-like environment, use `\ref`.

For cross-references to a displayed formula, use `\eqref`.

For list items `\label` and `\ref` are not mandatory.

For references to the bibliography, see §8.2.

³The `cleveref` package may resolve this issue; see §6.0.5.

§6.0.2	\pageref. Cross-references to pages are not allowed in journals and chapters in collected volumes. Query the author about rephrasing. In <i>books</i> , \pageref is allowed.	<div>✗ See page 12.</div> <div>✓ See the remark following Lemma 3.7.</div>
§6.0.3	Theorems and the like. Cross-references to theorems, sections, etc. must include the type of ‘object’ referred to. See also §2.2.4 and §2.2.5. Do not abbreviate the words ‘Section’, ‘Figure’, ‘Theorem’, etc. For an exception, see §8.2.2.	<div>✗ See 3.1. ✗ See Thm. 3.1.</div> <div>✗ See Theorem (3.1).</div> <div>✓ See Theorem 3.1. ✓ See (3.1).</div>
§6.0.4	References with/without article. See the examples on the right.	<div>✓ No article required: Part A, Section 3, Theorem 3.1, inequality (4.1), Step 1, case (a), equation (4.1), problem (P), condition (7.2), assumption (4.2), inequality (2.7), item (2), property (T), Definitions 3.1–3.3</div> <div>✓ Article recommended: the Cauchy–Schwarz inequality (3.1), the strict inequality (4.1), the Main/main Theorem 3.1, the unsolved problem (P)</div>
§6.0.5	The cleveref package. When the cleveref package is used, ensure that numbers in cross-references are always upright. Add: <pre>\usepackage[nosort]{cleveref} \crefdefaultlabelformat{#2\textup{#1}#3}</pre> If you need an Oxford comma in lists of three or more cross-references, add: <pre>\newcommand\creflastconjunction{, and\nobreakspace} \crefname{thm}{Theorem}{Theorems}</pre>	<div>✓ Under the assumptions of Lemma 2</div> <div>✗ Under the assumptions of Lemma 2</div> <div>✓ See Theorems 1.2, 1.3, and 1.4.</div> <div>✗ See See \Cref{main,main2,iso}.</div>

§7 Figures and tables

§7.1 Figures

- §7.1.1 Quality.** 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. In case of low quality, ask the author to provide new figure files; vector graphic formats (.eps, .pdf) are strongly preferred to raster formats (.jpeg, .png).
- §7.1.2 Colour.** Figures can be printed in colour and must be the same in the online and print version (pay attention to accessibility). For aesthetic reasons, in exceptional cases it may be advisable to convert an image to grayscale.
- §7.1.3 Trim and rotate.** Authors sometimes submit figures having a whitespace border that is not part of the figure and thus has to be cropped.
- One way to crop an image is to use the trim/clip options of \includegraphics.

```
C \includegraphics[width=50mm,
trim={0 90 0 30},clip]{figure}
```

The Perl script [PDFcrop](#) removes white margins from .pdf files. Examples of how to use PDFcrop in the *Windows shell* are shown on the right.

```
To crop a single figure, runline pdfcrop figure.pdf
figure.pdf
To crop all .pdf figures in the current directory, runline for %f in
(*.pdf) do pdfcrop %f %f
```

Occasionally there is a need to rotate an image (before cropping) to correct for a skewed horizon.
- §7.1.4 Sizing.** All figures in the work should be sized (a) to be legible to readers, (b) to fit within the type area, and (c) to be consistent in font size (see §7.1.5) and line width.

§7.1.5 Lettering. Text in figures should be consistent in font type and size, ideally throughout the work.

The font size of the lettering must not exceed that of the running text (`\normalsize`); ideally the font size should be the same as in the figure caption (`\small`). Ensure that the smallest font size used is still legible.

For figures that are integrated via `\includegraphics`, the lettering can possibly be modified as follows: Erase the letters in the figure file and then relabel the figure in \LaTeX code using the [overpic package](#). There are many more options – depending heavily on the file format.

However, prior to any time-consuming image processing consult the publisher. Requirements might also differ for journals and books projects.

§7.1.6 Figure captions. In general, each figure should have a caption. Ask the author to provide one if it is missing.

If a figure caption consists of an incomplete sentence, the author can decide whether or not to have a closing punctuation. However, it should be consistent throughout the work.

§7.1.7 Call-outs. Cross-reference to each figure is expected in the text such as ‘(see Figure 2)’. If such cross-reference is missing, ask the author to propose where and how to insert one.

§7.1.8 Figure placement. Place the figures using the placement options h, t, b, p.

Do not place figures with parameter h in the middle of a paragraph (but always *between* two ‘objects’). Moreover, ensure that a sufficient number of text lines is above and below such ‘midpage’ figures; two/three lines are definitely not enough.

N.B.: If the \LaTeX code of a figure environment stands, e.g., between two theorem environments, this can result in unwanted vertical space. So it is best to place the code between two ‘normal’ text paragraphs.

```
C \end{theorem}
X \begin{figure}...\end{figure}
\begin{theorem}
```

§7.1.9 Side-by-side figures. Small figures can be placed left and right of each other. See the sample on the right.

Note the % sign at the end of the first minipage.

```
C \begin{figure}[t!]
\begin{minipage}[b]{.5\textwidth}
\centering
\includegraphics[width=.8\textwidth]{...}
\caption{...}\label{fig:1}
\end{minipage}%
\begin{minipage}[b]{.5\textwidth}
\centering
\includegraphics[width=.8\textwidth]{...}
\caption{...}\label{fig:2}
\end{minipage}
\end{figure}
```

§7.1.10 Multi-panel figures. Keep the author’s labelling. If it is used inconsistently, ask the author to unify it.

If labels have to be added, we prefer lowercase letters: (a), (b), (c), etc.

§7.2 Tables

§7.2.1 Table placement. Same as for figures; see §7.1.8.

§7.2.2 Table captions. Every table should have a caption (see §7.1.6) and it comes *below* the table.

§7.2.3 Call-outs. There must be a cross-reference to each table in the text (see §7.1.7).

§7.2.4 Format. Other than placing the caption at the bottom of a table, there are no further specifications on table format. However, here are some recommendations:

Column alignment: Avoid centred columns. Usually columns are either left-aligned (text) or right-aligned (for numbers). In exceptional cases, you might want to align numbers on a decimal point.

Lines: Horizontal lines are best created using the booktabs package: in the simplest of cases, the column headings are enclosed by `\toprule` and `\midrule`, the table ends with `\bottomrule`.

Remove vertical lines if possible.

<i>n</i>	<i>e^x</i>		<i>sin(x)</i>		<i>cos(x)</i>	
	<i>A</i>	<i>B</i>	<i>A</i>	<i>B</i>	<i>A</i>	<i>B</i>
8	73.44	41	3.75	44	1	3
9	3.5	48	3.79	52	–	1
10	53.74	55	3.81	60	5	1

Table 1. I am your caption.

§7.2.5 Table width. Attractive results can be achieved by the tabularx package, specifying the width of a table; e.g., to make subsequent tables the same width, or to make a table not just *almost* but *exactly* the width of the type area.

```
\newcolumntype{L}{>\raggedright\arraybackslash}X}
\newcolumntype{M}[1]{>\raggedright\arraybackslashp{#1}}
\begin{tabularx}{\textwidth}{M{15mm}LLLL}\toprule
...\\ \midrule
...\\
...\\ \bottomrule
\end{tabularx}
```

§7.2.6 Landscape tables. If a very broad table cannot be converted into portrait orientation, it can be set landscape.

§8 Bibliography

§8.0.1 Order of references. Bibcheck/BibTeX will ensure the correct order. Entries are sorted by three criteria:⁴

- (1) Alphabetical order of **authors**. We follow the word-by-word system (see [Chicago]), e.g., ‘X. Ferná Pérez < A. Fernández’. Entries of different authors with the same surname are sorted according to the initials of their given names: ‘H. Miller < S. Miller’. A single-author entry precedes a multi-author entry beginning with the same name. Entries by two or more authors in which only the first author is the same are sorted according to the coauthors’ surnames.
- (2) Entries by the same authors (and in the same order) are sorted according to the **publication year** (for preprints as well). Entries of the form ‘to appear’ are treated as if they had publication year ∞.
- (3) If the authors *and* the publication years of two entries are identical, they are sorted in alphabetical order of their **titles**. Do not ignore ‘the’, ‘a’, ‘an’ (as suggested by [Chicago]): ‘R. Ginger, Sets < R. Ginger, The Function’.

There is no fourth criterion. It is always ‘X. Zhong, Critical Schrödinger systems (2015) < X. Zhong, Elliptic systems (2015)’, regardless of the months in which both publications appeared or their publication type.

Details on alphabetizing names containing particles (‘Charles de Gaulle’) and other special cases can be found in §§16.71–16.87 of [Chicago] – however, in practice, such questions rarely arise since Bibcheck takes the names as they are stored in MathSciNet, and BibTeX then sorts them according to rules we can adopt.

§8.1 Format of the bibliography

§8.1.1 Bibcheck. Use Bibcheck and the .bst file we provide for the given work. See the Bibcheck manual for more information. Do not forget to check the result obtained by Bibcheck – it is usually good, but often not perfect.

⁴For the sake of simplicity, we only talk about authors, but we also mean editors.

- §8.1.2 Bibliography style file.** The general layout of the bibliography is produced by our .bst file.
Do not worry too much about line breaks in the bibliography. Only very ugly breaks (mainly breaking after ‘J.’ in ‘J. Spectr. Theory’ or within page ranges) should be avoided.
- §8.1.3 Author names.** Between initials use a blank space (or at least a spatium).
`\bysame` is not allowed.
- Often ‘Philip’ and ‘Yuri’ (to name only two) are abbreviated as ‘Ph.’ and ‘Yu.’ (since they correspond to single Greek resp. Russian letters). It can stay that way.
- §8.1.4 Hyphen vs. en-dash in titles.** Unfortunately, MathSciNet (where Bibcheck gets its information from) seems to save titles with en-dashes replaced by hyphens.
- Please restore the correct en-dashes.
- §8.1.5 Non-English publications.** Titles in Latin alphabet are to be given in their original language. Titles in other languages (e.g., Russian) are to be translated into English, and ‘(in Russian)’ is added after the title. Contact the publisher if no electronic reference is available for a reference of the latter type.
- §8.1.6 Abbreviations of serial names.** Titles of journals and book series are to be abbreviated as in MathSciNet (mind some errors in the [newest list](#)). From version 1.4, Bibcheck also checks the abbreviations, in most cases it should provide the right result.
- If MathSciNet does not provide an abbreviation for a series, use the abbreviation you find in [zbMATH’s Serials Search](#).
- §8.1.7 Publisher names.** Use the full form or the abbreviation in MathSciNet (provided by Bibcheck).
- §8.1.8 Zbl and MR numbers.** For each publication, add the IDs of zbMATH and MathSciNet (if they exist).
If a contribution from a collected volume is cited, but zbMATH or MathSciNet only lists the complete work, *omit* the Zbl or MR number. See, e.g., [Zbl 1058.81002](#), where it says: ‘The articles of this volume will not be indexed individually.’
Errata entries from MathSciNet often include an extra part in the title referencing the MR code of the original publication. See, e.g., [MR 2726605](#). Remove this code.
False Zbl matches (even for unpublished works) are not rare, please check them carefully.
- §8.1.9 DOI hyperlinks.** For each publication with a DOI, set the title as a link to <https://doi.org/DOI>. See the [Bibcheck](#) manual for further details.
- §8.1.10 Article number.** Some (mostly online-only) journals publish articles without a unique page range. If such an article has an article number, include this ID preceded by the word ‘article no.’ – even if the journal has a different way of denoting this (from v1.4, Bibcheck takes care about that).
- Only if the article has *neither* a page range *nor* an article number, use the `\DOI` command *in addition* to the DOI hyperlink (see §8.1.9).

✓ [3] M. J. Berg, Analysis of [...]
✓ [4] N. Bourbaki, The architecture of [...]
✗ [5] —, Sur le théorème de [...]

✗ The non-generic local Gan-Gross-Prasad conjecture
✓ The non-generic local Gan–Gross–Prasad conjecture

✗ Lecture Notes in Mathematicsline =
Lect. Notes Math. [zbMATH]
✓ Lecture Notes in Mathematicsline =
Lecture Notes in Math. [MR]

NEW

✓ Amer. Math. Soc. ✓ American Mathematical Society
✗ World Sci. Publ. ✓ World Scientific

NEW

NEW

✗ *Int. Math. Res. Not. IMRN* (2021), ID rnab206
✗ *Int. Math. Res. Not. IMRN* (2021), article rnab206
✓ *Int. Math. Res. Not. IMRN* (2021), article no. rnab206

✓ [10] C. Reilly, [Neuromimesis: Picturing the humanities picturing the brain](#). *Front. Integr. Neurosci.* **16** (2022), DOI [10.3389/fnint.2022.760785](#)

If the total number of pages is available in MathSciNet, it can be added optionally (no need to remove it from the Bibcheck result).

§8.1.11 Preprints. For each preprint, ask the author whether it has been published in a journal in the meantime. The same applies to publications indicated as ‘to appear’.

A paper still under review should be cited as a preprint, ‘submitted’ information is not supported.

Most preprints live on [arXiv](#). To insert the arXiv article identifier, use the command `\arxiv` (`= \arXiv`) defined by our style files (please avoid self-defined commands).

‘Please check whether [X] has a new publication status. If you refer to specific objects in [X], do these references need an update? (Counters might have changed in the final publication.)’

C `\arxiv{1506.04400v1}`

C `\arXiv{1506.04400v1}`

Always include the version number of arXiv preprints by the following pattern.

- If the authors refer to a particular version, then keep it and include the title, authors, etc. of that version.
- If the authors do not mention any particular version, then quote the latest version and include the title, authors, etc. of that.

From v1.4 on, Bibcheck also checks and formats citations of arXiv preprints in this way. Please pay special attention to the capitalisation of these titles.

NEW

§8.1.12 Publication year of a preprint. For arXiv preprints include the year of publication as follows (and as done by Bibcheck from v.1.4).

- If the first and the quoted versions are not from the same year, then include both years as in the right column.
- If the first and the quoted versions are from the same year, then only include that year as in the right column.

For preprints not in the arXiv, ask the authors to provide the publication year and a URL.

✓ [25] A. Plessis, A new way to tackle a conjecture of Rémond. [v1] 2022, [v3] 2023, arXiv:[2201.06226v3](#)

✓ [19] T. Koshikawa, On heights of motives with semistable reduction 2015, arXiv:[1505.01873v3](#)

NEW

§8.1.13 Preprints vs. to appear. If the author cites the version that is to appear in a journal, but not available yet, use the normal ‘arXiv style’ and add one extra sentence about the future publication. Should the authors’ text of this kind be lost by Bibcheck, take care about re-inserting it.

✓ [12] I. Jones, Cacti and cells. 2015, arXiv:[1506.04400v1](#), to appear in *J. Eur. Math. Soc.*

NEW

§8.1.14 URLs. Website URLs must only be included for citing online sources that lack DOIs.

For URLs in the bibliography, the entry should consist of the name of the author/organisation, the webpage title (if applicable), and the URL itself together with the date when it was visited.

✗ [13] <https://stacks.math.columbia.edu>

✓ [13] The Stacks project, <https://stacks.math.columbia.edu> visited on 3 September 2023

§8.1.15 Personal communication. References to any type of private communication should be given in the text or as a footnote. The author may specify the type of communication (e.g., email, letter, phone call, private meeting, etc.) as well as the date.

✗ [14] T. Mrówka, personal communication

✓ ¹ T. Mrówka, email to the author, 2 May 2017.

§8.1.16 Back references. Back references (links in the bibliography back to the main text) are not allowed.

✗ [15] J.-P. Serre, *Local fields*. Graduate Texts in Math. 67, Springer, New York, 1979. pages 5, 16

§8.2 Reference citations

§8.2.1 Citations with appended information. If a certain page, theorem, etc. of another publication is referred to, it is preferably mentioned *inside* the brackets.

Exception: A (sub-)clause must not start with brackets.

It should be avoided to state only the number of the cited object ('7.4') without mentioning its type ('Theorem'). You may write [8, ■■■ 7.4] and ask the author to provide whether it is 'Theorem', 'Théorème', 'Lemma', 'Section', etc.

There are exceptions where the type can be omitted, e.g., books by Bourbaki.

- ✓ The proof of [5, Theorem 1] ...
- ▶ The proof of Theorem 1 of [5] ...
- ✗ We refer to Proposition 7.1 and Lemma 7.10 in [9]. [not clear whether the proposition is part of [9] or the present article]
- ✗ ... is valid. [13, Lemma 5] shows that ...
- ✗ [8, 7.4]
- ✓ [8, Lem. 7.4], [8, §7.4], [8, (7.4)]

§8.2.2 Abbreviations in appended information. Inside brackets, it is allowed to use abbreviations; they should only be used if the author wants them. Compare §6.0.3.

For both English and French references, we recommend the abbreviations given on the right. Add an 's' before the period for the plural form.

- ▶ Ch., Thm., Lem., Prop., Cor.,
Exm. (Example), Exer. (Exercise)
- ▶ Chs., Thms., Lems., Props., Cors.,
Exms. (Examples), Exers. (Exercises)

§8.2.3 Combining citations. It is the preferred style to collect multiple references (without appended information) in a single pair of brackets and in ascending order.

- ✓ [2, 3, 9–13, 17]
- ✓ [2, Thm. 1.3] and [3, 9]

§8.2.4 Citations in abstracts.
`\cite` must not be used in abstracts.

Instead, rephrase references using the publication year in parentheses.

- ✓ It is based on the works by Winter (1856) and Summer (2014).
- ✓ This answers a question of Hirzebruch et al. (1957).
- ✓ This result was first obtained in the book/preprint/thesis by Giorgi (2002).
- ✓ This generalises Theorem 4.2 by Jones [J. Comb. Algebra 5 (2021), 59–92].
- ✓ Poénaru's diagram [in: Topology and Geometry (2021), 399–431] is commutative.

In exceptional cases it may be necessary to specify the exact source of an article. In these rare cases, use the following abbreviation:

- *Article in a journal*: authors [journal volume (year), pages]
- *Article in a collected volume*: authors [in: title of the book (year), pages]

N.B.: The title of the article is omitted. The usual bold or italic distinctions are not used.

§8.2.5 Uncited entries. Papercheck lists all entries from the bibliography that are not cited in the text. Alternatively, the `refcheck` package produces margin notes distinguishing non-cited references.

Ask the authors to choose either to `\cite` or to remove these `\bibitem`'s.

§9 Journal-specific

§9.1 Personal metadata

§9.1.1 Author names and IDs. Ask the authors if their names are not alphabetically ordered.

For each author fill in the fields in the right column. The number in {} after `\emsauthor` refers to the position of the given author in the authors' list.

```
C \emsauthor{1}{  
  \givenname{First}  
  \surname{Author}  
  \mrid{1234567}  
  \orcid{0000-0001-0002-0003}  
}{F.~Author}
```

If an author does not want to write out their given name, consult the publisher.

The authors' MR ID should be included in the metadata.xml file of the source bundle. Should it be missing, please ask for it in a margin note of the proof. If a (first time) author has no MR ID yet, please leave it blank.

The ORCID should be provided by the authors. Many of them have no ORCID, in this case it can be omitted.

For the running head, use initials and surnames in the final {}. If some authors do not provide their first- and last names separately, you can assume that the surname comes last (western convention). In case of doubts, please ask the authors in a margin note of the proof to approve it.

§9.1.2 Corresponding author. We refrain from naming the corresponding author. If the author's original manuscript contains such indication, it is preferably removed from the galley proofs.

Add the designation 'corresponding author' only upon the author's explicit request and after consultation with the publisher.

C `\emsauthor*` → '(corresponding author)' is automatically placed after the author's name in the affiliation.

§9.1.3 Affiliations. Always add the university, city, country, and e-mail address (unless an author is outside of academia of course, e.g., working in a company or submitting using their home address). Full address (including institute/department, street/P.O. Box, zip code) is preferred but not mandatory.

Use the fields in the right column for entering the address information for each author.

The number in {} after `\Emsaffil` refers to the number of the same author in the `\emsauthor` field.

Every research organisation has a ROR ID. Kindly look it up using the name in the `\organisation` field here: <https://ror.org>.

The `\address` field can contain a street address or P.O. Box or can be left blank.

C `\Emsaffil{1}{
 \department{Department of Mathematics}
 \organisation{University}
 \rorid{01a2bcd34}
 \address{Street 7}
 \zip{01234}
 \city{City}
 \country{Country}
 \pretext{2}{current affiliation:}
 \department{2}{}
 \organisation{2}{}
 \rorid{2}{}
 \address{2}{}
 \zip{2}{}
 \city{2}{}
 \country{2}{}
 \affemail{name@university.xy}
 \furtheremail{1}{}
 \furtheremail{2}{}}`

For US addresses, please include the abbreviated state name in the zip code (in the `\zip` field), separated with a space (e.g., NY 12345).

Before or after an affiliation you can add custom text via the `\pretext{}` and `\posttext{}` commands, respectively.

If an author wants to state multiple addresses, the address fields can be repeated with consistent numbers in {} after each field. Fill in all (mandatory) fields for each affiliation. No need to care about repeated information (e.g., the same organisation or same country for more than one affiliation), the style takes care about removing the redundant bits. Do not include more (empty) affiliations than an author actually has.

Always keep the original author address at which the research was carried out. If an author wants to state a 'current address', add it as a last affiliation adding 'current address:' in the `\pretext{}` field. (Write 'address', not 'affiliation'.)

In whatever order the subfields of `\Emsaffil` are presented, they will appear in the same (correct) order in the pdf file. Do not manipulate it (e.g., by interchanging the contents of subfields).

- Spell out 'Univ.' ('University' or 'Université') and similar words.
- Author decides whether the affiliation is given in the national language or in English: 'Technische Universität Berlin' or 'Technical University of Berlin'.
- Use 2-letter codes for the state abbreviation preceding US zip codes: 'NJ 07102', 'TX 77843-3368'
- Country must always be in English: 'Mexico' and not 'México'.
- Preferred spelling: 'P.R. China', 'USA', 'UK'
- Allowed: 'Scotland, UK', 'Catalonia, Spain'
- Remove country code preceding zip codes: 'D-', 'F-'

§9.1.4 Email. No capital letters in email addresses are allowed.

Ask for an institutional email address if only a personal one is provided.

✓ ann.doe@university.com
✗ Ann.Doe@university.com
✗ https://university.com/author

If an author wants to provide more than one email address, use the command `\furtheremail` (with numbers in `{}` if needed). There is no field for websites in the address block, do not use other fields for that.

§9.1.5 Deceased authors. If an author has passed away, add before their address the *italic* text of the form shown on the right. Use the `\pretext` field for the text and the `\posttext` field for the period at the end.

✓ *Mark V. Sapir passed away on 8 October 2022. His affiliation was with the Department of Mathematics, Vanderbilt University, Nashville, USA.*

Do not include any email address, but inform the publisher if none of the MR ID and the ORCID are available.

§9.2 Appendix

§9.2.1 Appendix title. For an appendix without title, ask the author to provide a title.

§9.2.2 Appendix authors. Appendix authors' names and IDs are treated similarly to regular authors with the only exception that in their case no abbreviated name can be provided, see the code on the right.

```
C \Appendixauthor{1}{  
  \givenname{Appendix}  
  \surname{Author}  
  \mrid{1234567}  
  \orcid{0000-0001-0002-0003}}
```

Use the variant `\Appendixauthor*` for appendix authors that are also regular authors at the same time.

For the affiliations of the appendix authors the `\Appendixaffil` field is to be used with the same subfields as for regular authors, see §9.1.3.

In order to have the authors of an appendix listed, use `\appendixauthorsection{}` instead of `\section{}`.


§9.3 Non-personal metadata

§9.3.1 Title. Manual line breaks should only be inserted in the title if the default line break is not satisfying. For example: (1) Avoid having only one word on the last line (2) If \LaTeX breaks the title right *after* any preposition, article, or conjunction, insert a `\break` right *before* this preposition, article, or conjunction.

§9.3.2 Subtitle. Keep the spelling of the subtitle that the author chose (with/without colon, capitalising first word of subtitle/not, comma/no comma before 'I', 'II', etc.) because another part of the paper might be submitted somewhere else and the same structure of the title is preferable.

§9.3.3 Short title. If there is enough space, use the full title for the running head.

If you have to shorten the title or if you need ideas *how* to shorten it, query the author.



The dark-gray box on the left should ideally be *at least* as wide as the dark-gray box carrying the page number.

§9.3.4 Abstract. “Keep in mind when editing that an abstract must be able to stand alone, independent of the article; abstracts appear individually in databases for indexing services. Abstracts cannot contain references to bibliography citations or any of the article’s numbered elements, such as theorems and equations.” [AMS]

The abstract may contain inline formulas. Displayed formulas should be kept to an absolute minimum. Only use \LaTeX compatible commands in the title, abstract and keywords. In particular, user-defined, and your own macros in the abstract are absolutely not allowed, please resolve all of them.

NEW

An abstract should only consist of one paragraph, multiple paragraphs are only allowed if it is unusually long.

→ See §8.2.4 for citations in abstracts.

§9.3.5 Dedications and epigraphs. Place them right after the abstract, before the beginning of the main text.

Use a centred environment and italic fonts.

No period is needed at the end.

On the spectrum of critical almost Mathieu operators in the rational case

Svetlana Jitomirskaya, Lyuben Konstantinov, and Igor Krasovsky

Abstract. We derive a new Chambers-type formula and prove sharper upper bounds on the measure of the spectrum of critical almost Mathieu operators with rational frequencies.

Dedicated to the memory of M. A. Shubin

§9.3.6 MSC 2020. Add the [2020 Mathematics Subject Classification](#) codes the author has designated.

There must be *exactly one* primary code.

Secondary codes are optional and can be arbitrarily many.

Use the syntax `\classification[]{}{}` given in the tex template.

“Every item [...] receives precisely one primary classification, which is simply the MSC code that describes its principal contribution. When an item contains several principal contributions to different areas, the primary classification should cover the most important among them. A paper or book may be assigned one or several secondary classification numbers to cover any remaining principal contributions, ancillary results, motivation or origin of the matters discussed, intended or potential field of application, or other significant aspects worthy of notice.”

[<https://zbmath.org/static/msc2020.pdf>]

If the author supplied two or more codes without distinguishing between primary and secondary, take the first code as primary and the rest as secondary; ask the author if they agree with this assignment.

- ✗ Primary 14P99, 13B22, 26C15
- ✓ Primary 14P99; Secondary 13B22, 26C15

Codes, in particular primary ones, are to describe the mathematics as precisely as possible. In case of generic codes with XX or xx or even 99, ask the author to possibly provide better ones. If needed, consult the publisher for suggestions.

- ✗ 05-XX ✗ 05-06 ✗ 05Cxx
- ✓ 05C40

§9.3.7 Keywords. Ask the authors to provide further keywords if there are less than two, and ask about possible reduction if there are more than six.

Separate keywords with commas. Capitalise only those keywords that start with a proper name.

§9.3.8 Table of contents. An article may contain a table of contents (ToC) only if

- (a) the author has included one in their manuscript *and*
- (b) the article in its final layout is at least 50 pages long.

A ToC should only contain the sections, no subsections.

This is a guideline to help you decide when to remove `\tableofcontents` from the author's .tex file. Of course there can always be good reasons for exceptions that are worthy of discussion.

§9.3.9 Footnote on title page. No footnote is allowed on the title page. The text must be reformulated accordingly and the author informed.

If – only after consultation with the publisher – additional information is to be placed in the first page's ‘footnote area’, the hack shown on the right works in most style files; see, e.g., [RSMUP/117](#).

```
C \makeatletter
  \pretocmd\classificationname{\textup{Special!}}%
  \vskip.5\baselineskip}{-}{-}
  \makeatother
  [if the regular footnote on page 1 contains MSC codes]

C \makeatletter
  \apptocmd\ems@affillist{Special!}%
  \vskip.5\baselineskip}{-}{-}
  \makeatother
  [if the regular footnote on page 1 contains author addresses]
```

§9.3.10 History dates. Include all relevant dates shown on the right (removing the revision date if it does not apply). Only with the given date format will your file be compiled with no error message.

```
C \received{1 January 1001}
  \revised{2 February 2002}
  \accepted{3 March 3003}
```


If your journal provides dates in a different language, it will be translated during the compilation.

You don't need to worry about each journal using different 'history dates' (received, revised, accepted/communicated) and a different date format (see §A.3), the right format will automatically appear in the pdf file, and unneeded bits will be made invisible by the style.

§9.3.11 Edit Flow ID. Most manuscripts come from Edit Flow, in all such cases please add the ID as in the right column.

For articles not handled in Edit Flow, please remove this field, or leave it blank.

```
\editflow{210117-Author}
```

§9.4 Supplementary material

§9.4.1 Call-out. If an author provides supplementary material for a work, first contact the publisher.

If a decision is made to publish the material, it must be mentioned at least once in the text. It should be referenced via the article's DOI (see the example on the right).

✓ The code can be accessed by following the article's DOI.

C ... \href{https://doi.org/10.4171/...}{DOI}

§9.4.2 Website. Supplementary material will be made available on the publisher's website in one file (e.g., .zip). For this purpose, the author must provide

- a brief and concise description of the material (about 40 characters) and
- a descriptive file name.

The material does not need to be edited.

§9.5 Erratum

§9.5.1 Title. The title must be of the form shown right.
See [JEMS/1261](#).

✓ Erratum to "Original title"

✓ Corrigendum to "Original title"

§9.5.2 Abstract. Include a brief abstract containing a reference (see §8.2.4) to the original article.

✓ **Abstract.** This erratum corrects the statement and proof of Theorem 1.2 of [J. Eur. Math. Soc. 24, 3031–3053 (2022)].

§9.5.3 Bibliography. Add the original article to the reference list.

§9.6 French-language articles

§9.6.1 French typesetting conventions. Choosing French as the document's main language will switch on French typesetting conventions, e.g., space before some punctuation.

C lang=french

§9.6.2 French caption names. Fixed terms such as 'Keywords' or 'Funding' are automatically translated by the .sty file. (Not yet available in all .sty files.)

✓ Résumé, Mots-clés, Classification Mathématique (2020), Table des matières, Démonstration, Tableau, Remerciements, Financement, Références

§9.6.3 French date format. The French date format for received/revised/accepted dates is ensured by the style.

✓ Reçu le 23 octobre 2020; révisé le 18 décembre 2021

§9.6.4 Two abstracts. The abstract must be given in both French (first) and English.

```
C \begin{abstract} FRENCH ABSTRACT \end{abstract}
   \begin{abstract*}{british} ENGLISH ABSTRACT \end{abstract*}
```

§9.6.5 Two keyword lists. The keywords must be given in both French and English.

```
C \keywords{LIST OF FRENCH KEYWORDS}
   \keywords*{LIST OF ENGLISH KEYWORDS}
```

In most journals, the English keywords will not be printed in the .pdf file, but they are needed for the website; thus `\keywords*` is required.

§9.7 Annual index pages

No annual author- and title indices will be included in our journals from the 2024 volumes on.

§10 Book-specific

§10.0.1 A4 paper size. We recommend working *without* the `paper=a4` option. But if you want to use it and if you are working on a *hardcover* title, you must add `\geometry{lines=40}` to the preamble, because otherwise you get 41 lines, which we only use for softcover titles.

§10.0.2 Collected volumes. For books where each chapter has different authors:

- merge all chapters to one project (e.g., using `\include`);
- use `ems-book` package options `contrib,counterwithoutchapter`;
- start each chapter with `\makecontribtitle` and `\setcounter{section}{0}`.

§A Appendix

§A.1 Journal workflow

- (1) Manuscripts are being sent via email, sftp or through a submission system (Ed.Office and Editflow).
- (2) Processing order is usually according to acceptance date unless stated otherwise.
- (3) For journals using a submission system move the articles to ‘typesetting’ resp. ‘in production’.
- (4) Send the 1st proofs to all authors using our standard cover letter and attach the license agreement form.
- (5) Even if there were only a few corrections, send the 2nd proofs to the corresponding author (the one who sent the corrections).
- (6) If non-trivial changes to mathematical content were made, contact the publisher.
- (7) For exceptional journals (currently: DM, RSMUP), send the finalized articles to the editors for their approval.
- (8) If the ‘online first’ (OF) version is ready, upload it to the shared folder (e.g., sftp or Dropbox). See §A.2 for folder structure and file naming conventions.
- (9) Inform the publisher via email about the new OF article.
- (10) For journals using a submission system, update the article status to ‘typeset’ resp. ‘online first’.
- (11) Author requests that come in after publication of an article may be forwarded to the publisher, e.g., requests for receiving the final .pdf file.
- (12) If not organized otherwise, the production department takes care of the issue composition and requests the compiled issue from the typesetters. See §A.2 for folder structure and file naming conventions.

```
JRNL
|--OF    [online first]
|  |--JRNL-115
|  |  |--JRNL-115.pdf
|  |  |--JRNL-115.tex
|  |  |--ems-JRNL.sty
|  |  |--JRNL-115.bib  [1]
|  |  |--{xxx}.bst    [1]
|  |  |--figures      [2]
|  |  |  |--{xxx}.pdf/jpg/eps/...
|  |  |--author-corrections
|  |  |  |--{xxx}.pdf/txt  [3]
|  |  |--JRNL-115-LA[1of2].pdf  [4]
|  |  |--JRNL-115-LA[2of2].pdf
|
|--2023-016-002  [year-volume-issue]
|  |--online  [mode=online]
|  |  |--JRNL-2023-016-002-01.pdf
|  |  |--JRNL-2023-016-002-02.pdf
|  |  |--...
|  |--print   [mode=print]
|  |  |--JRNL-2023-016-002-01p.pdf  [5]
|  |  |--JRNL-2023-016-002-02p.pdf
|  |  |--...
|  |  |--JRNL-2023-016-002-Bookblock.pdf  [6]
|  |--sources
|  |  |--JRNL-115
|  |  |  |--JRNL-115.tex
|  |  |  |--ems-JRNL.sty
|  |  |  |--JRNL-115.bib  [1]
|  |  |  |--{xxx}.bst    [1]
|  |  |  |--figures      [2]
|  |  |  |  |--{xxx}.pdf/jpg/eps/...
|  |  |  |--author-corrections
|  |  |  |  |--{xxx}.pdf/txt  [3]
|  |  |  |--JRNL-115-LA[1of2].pdf  [4]
|  |  |  |--JRNL-115-LA[2of2].pdf
|  |  |--...
|  |--annual-indexes  [7]
|  |  |--authors-index.pdf
|  |  |--authors-index.tex
|  |  |--contents-index.pdf
|  |  |--contents-index.tex
```

§A.2 Folder structure and file naming convention

Use the journal code in all file and folder names (e.g., JRNL = JEMS, and the number from the last bit of the DOI).

[1] If the bibliography is part of the .tex file, then no .bib or .bst file is needed.

[2] We only need the files you used to compile the final version; in general it is two files: the .tex and the .sty file. Plus all final figure files (*not* the author’s version) in the figures subfolder.

[3] If the author corrections were sent as a list via email, copy the list into a .txt file.

[4] Signed license agreements.

[5] Note the ‘p’ at the end of the print .pdf file names.

[6] All .pdf files combined to ‘bookblock’. In case the issue is compiled by different typesetters, the combined ‘bookblock’ can be omitted.

[7] Annual indexes (see §A.3) only for the last issue of the year.

§A.3 Our journals

Code	Date format	Received	Revised	Accepted	Published online	Communicated by	Title case	Comment
AG	9 May 2023	✓	—	✓	—	—	down	—
AIHPC	9 May 2023	✓	final rev.	✓	—	—	down	—
AIHPD	9 May 2023	✓	final rev.	—	—	✓	down	—
CMH	9 May 2023	✓	—	—	—	—	down	—
DM	9 May 2023	✓	final rev.	—	—	✓	down	—
EM	—	—	—	—	—	—	down	§A.4.3
EMSS	9 May 2023	✓	final rev.	—	—	—	down	—
GGD	9 May 2023	✓	—	—	—	—	down	—
IFB	9 May 2023	✓	final rev.	—	—	—	down	—
JCA	9 May 2023	✓	final rev.	—	—	—	down	—
JFG	9 May 2023	✓	final rev.	—	—	—	down	—
JNCG	9 May 2023	✓	final rev.	—	—	—	down	—
JST	9 May 2023	✓	final rev.	—	—	—	down	—
JEMS	May 9, 2023	✓	final rev.	—	—	—	down	—
LEM	le 9 mai 2023	✓	—	—	—	—	down	—
MSL	9 May 2023	✓	final rev.	—	—	—	down	—
MAG	—	—	—	—	—	—	down	—
MEMS	—	—	—	—	—	—	down	—
OWR	—	—	—	—	—	—	up	—
PM	9 May 2023	✓	final rev.	—	—	—	down	—
PRIMS	May 9, 2023	✓	each rev.	—	—	✓	up	—
QT	9 May 2023	✓	—	—	—	—	down	—
RSMUP	il 9 maggio 2023	✓	—	—	—	—	down	§A.4.1, §A.4.3
RLM	9 May 2023	✓	final rev.	—	—	—	down	§A.4.2, §A.4.3
RMI	May 9, 2023	✓	final rev.	—	✓	—	down	—
ZAA	9 May 2023	✓	final rev.	—	—	—	down	—

§A.4 Hacks

§A.4.1 Italian date format. The style takes care about the Italian date format, in particular about the appropriate article:

For 1, 8, 11: l' Otherwise: il

✓ l'8 febbraio 2023

✓ il 2 febbraio 2023

§A.4.2 Running title in RLM. For $\$$ expressions in the running title, use the hack shown on the right (otherwise the symbols would be too large).

```
C \title{The  $W^{1,1}_0$ -minimum}
\newcommand\mathexpr{\tiny $W^{1,1}_0$ }
\titlemark{The \protect\mathexpr-minimum}
```

It really only works if you use a separate command; there must be no $\$$ expressions in `\titlemark` directly.

§A.4.3 Haček in small caps in New TX font. Three style files (EM, RLM, RSMUP) use the New TX font. In small caps, you may have trouble getting the haček/caron accent (\v) right. There was an incorrect glyph in the scaron.pc slot in regular and slanted. The author of newtxtext.sty, Michael Sharpe, corrected it, but it may take some time until the new version is available on CTAN. In the meantime, use the hack shown on the right.

✗ GARUNKŠTIS

✓ GARUNKŠTIS

```
C {\fontfamily{qtm}\selectfont
\textsc{Garunk\v{s}tis}}
```