

Typing Instructions for IAG Proceedings

Main settings at a glance

Printer: 600 dpi laser printer for text and line figures; 1200 dpi laser printer for halftones

Print area: 156 x 224 mm, 2 columns each at 74 mm with 8 mm space between the columns

Justified text, automatic hyphenation

Font: Times for text; Helvetica for headings

Type size: 10 pt for body text; line spacing 6 mm (=18 pt)

Small type: 8.5 pt; line spacing: 3.5 mm (= 10 pt); use for

- special text parts (less important, long quotes, etc.)
- lettering in figures and tables
- table headings, figure legends
- index

Pagination: front matter roman (I, II, etc.); main text arabic (1, 2, etc.)

Indent (for paragraphs in body text): 4 mm

Line spacing above and below displayed lists: at least 2 mm (=6 pt)

Each contribution begins on a new page

Set all headings flush left

Chapter heading (title of contribution): Helvetica (or Times) 18 pt bold

Chapter heading 1st order: Helvetica (or Times) 11 pt bold

Chapter heading 2nd order: Helvetica (or Times) 10 pt bold

Chapter heading 3rd and 4th order: Helvetica (or Times) 10 pt bold italic; set chapter number in bold letters, not italic

Maximum number of pages per paper is 6, including references.

In case of doubt, check the attached sample paper

1 Print Area, Font, Type Size

1.1 Format, Print Area, Justified Text (see enclosed sample)

Book format (STODOLA): 193 x 270 mm (width x height)
Printed area: 156 x 224 mm (width x height)
In 2 columns with each 74 mm width
and 8 mm space between the columns

When inputting the text, always use the full height and width of the print area. Set it as justified text and use an English hyphenation program. A shorter print area is required when under a section heading there is only space for a maximum of three lines of text; in this case the section heading as well as the text should be set on the next page.

1.2 Font, Type Size, Type Quality

The preferred fonts are *Times* for body text and *Helvetica* for headings.

For body text please choose the type size 10 points (1 point = 0.376 mm, rough rule: 3 points = 1 mm) and for line spacing 12 points or 4 mm. For the type size to use for headings and the spacing to set above and below them, see Chap.2 and the enclosed sample pages.

For readability and a good printed quality of your work please use a 600 dpi laser printer. If your work includes half-tone illustrations, you will need a 1200 dpi printer (and you should read Chap. 4).

2 The Main Text

The pages of the main text are assigned arabic page numbers. The text begins with page 1, which like all odd-numbered pages is a right-hand page. Every chapter should begin on a new right-hand page; for stylistic reasons the headers and page numbers are suppressed on chapter title pages, but these pages still have numbers.

2.1 Abstract and Keywords

The main text begins with the abstract which is identified by the word **abstract** in boldface type followed by a period. The text of the abstract, in normal type, begins on the same line after two spaces. At the end of the abstract insert two empty lines before listing a maximum of ten key words using the same format as for the abstract. Insert two empty lines after the keywords, followed by a horizontal line, and another two empty lines. Then type the first heading.

2.2 Headings

Set decimal classification numbers flush left and follow with the heading on the same line after two spaces. Do not use a period at the end of the heading. If the heading requires more than one line, it should be broken between groups of semantically linked words and set flush left, not justified.

Heading type sizes and spaces above and below are specified on sample pages. Note that if a heading is set immediately below a heading of the next-higher level, the space between them should be one blank line (4 mm).

2.3 Textual Emphasis

In running text, set emphasized words, phrases, or sentences in *italic* type. If absolutely necessary you may use **boldface** type for emphasis, but do so sparingly, as frequent use of boldface in running text reduces readability.

2.4 Paragraphs

The first paragraph after a heading begins flush left, as does one with an integrated heading, for in these cases it is clear where the paragraph begins. All other paragraphs should begin with an indent of 4 mm.

2.5 Displayed Lists

Before and after a displayed list set extra line spacing of 2 mm. To indicate the listed items you may use either en dashes (–) or, for example, numbers or bold points (bullets, ●), but please style displayed lists in a uniform way throughout your work. Please do not treat such lists as tables (for which see Chap. 3).

Example with en dash

- The en dash is longer than a hyphen (-) and shorter than an em dash (—); see Sect. 2.7.
- The space between en dash and text may be set with a tab stop at 4 mm.
- To ensure that the leaders stand free, format the item paragraphs with a hanging indent of 4 mm.

Example with numbers

1. The items may be one line or longer.
2. The space between number and text may be set with a tab stop at 4 mm (or let MS Word 7 automate the list formatting for you).
3. Format the item paragraphs with a hanging indent of 4 mm.

Example with bullets

- This example was generated by selecting the style from the dialog box in the Bullets and Numbering command on the Format menu in MS Word 7.
- The command sets a space after the item leader (here the bullet) and indents second and subsequent lines automatically.
- The method is quick and efficient, but the indent and leader style settings need to be set correctly.

2.6 Small Type

If it is necessary for you to assign a different visual weight to certain passages of text to distinguish them from normal running text, you may set them in smaller type (8.5 pt) with smaller line spacing (3.5 mm).

If these passages are your own text, then you may set them between the normal margins (see Sect. 2.3); if you wish to set long quotations in small type, then please inset them 10 mm (since this identifies them as quotations, you should delete initial and final quotation marks).

Example of text in small type

Case study. The housemaster of a large dormitory was seriously ill. None of the tests performed led to an unambiguous diagnosis. After a series of unsuccessful attempts at therapy a young assistant doctor discovered that the man had been infected by a female occupant of the dormitory who had returned from the tropics but who so far showed no symptoms.

The cause of this disease is unknown. The example shows that a thorough anamnesis is sometimes more important than routine diagnostic procedures.

Example of a text passage containing a quotation in small type

We would like to describe the relationship-regulating function of affective communication and the defense function of resistance associated with it by referring to a passage from Krause. After describing the complicated blend of affects and instinctual acts in sexual interaction, he concludes:

Before a terminal act of sexual nature can take place between two persons, they have to ensure that they get together at all, i. e., the distance between the partners must be reduced and finally eliminated. This can only happen if the anxiety affect generally accompanying such processes is outweighed by the antagonistic affects of joy, curiosity, interest, and security. This takes place by means of the mutual induction of positive affects. (Krause 1983, p. 1033)

Krause refers to a mutual induction of positive affects and to the reduction in an anxiety affect.

(Taken from H. Thomä and H. Kächele, *Psychoanalytic Practice*, Springer 1987, p. 110.)

Small type is principally used for: the list of references or bibliography (Chap. 5), running heads (Sect. 1.3), footnotes (Sect.

2.6), tables and their headings (Chap. 3), and figure legends (Sect. 3.1).

2.7 Footnotes

In running text footnotes are marked by superscript numerals (and in tables by superscript lowercase letters; see Chap. 3). Textual footnotes should be numbered from 1 for each new chapter. The footnote text ¹ should end with a period and be separated from body text by a ruled line. Many word processing programs (e. g., MS Word 6 and 7) set this line automatically. The distance between this line and the last line of text should be at least one blank line.

¹ This is the footnote text. It begins after a tab stop at 2.5 mm following the footnote numeral and should be set in small type (8.5 pt, line spacing 3.5 mm). Set a hanging indent of 2.5 mm for second and subsequent lines, so that the footnote numeral stands free.

2.8 Hyphens, En Dashes and Em Dashes

- Hyphens at the end of a line are set automatically by a hyphenation program.
- Hyphens used to abbreviate or link word groups (e. g., in the phrase “pre-and post-apocalyptic”) look identical to line-end hyphens.
- En and em dashes are longer, en dashes about twice as long and em dashes about three times as long. En and em dashes must generally be set as special characters (e.g., in MS Word for Windows using the key combination control + minus for en dashes and control + alt + minus for em dashes).
- The en dash used as “from ... to ...” is set without spacing before and after (see sample pages).
- The en dash used as a phrase marker – Springer prefers not to use em dashes – is set with a blank space before and after. On the use of this dash as an item leader in a bulleted list see Sect. 2.4.
- The en dash is also used to link the names of two distinct people in phrases denoting concepts associated with them, e.g., Bose–Einstein condensate, Löwenheim–Skolem theorem.

- Another use for the en dash is to link distinct nouns, or concepts at least one of which is denoted by a multiword phrase, e.g., space–time, post–Cold War.

2.9 Opening and Closing Quotation Marks

Please do not use the ambiguous ditto mark (0) to open and close a quoted passage. Use the “typographical” marks available in all good word processing programs, and please check that they are English (raised “66” as opening mark, raised “99” as closing mark). On when to use single or double quotation marks consult a good style manual (e. g., *The Chicago Manual of Style*).

2.10 Abbreviations, Numbers, Units, Hard Spaces

2.10.1 Abbreviations

For bibliographic abbreviations see Chap. 5. For cross-references in your book please use the following:

- p. (page) and pp. (pages)
- Chap. (chapter) and Chaps.
- Sect. (section) and Sects.
- Fig. (figure) and Figs.

In all these cases use the abbreviation only when a number (or number range) follows, and never at the beginning of a sentence. The word “Table” is always written in full.

Recognized standard abbreviations: AM, ca., cf., e. g., et al., etc., i. e., no., PM, vs.

If you wish to use numerous specialized abbreviations you should include a list of abbreviations in the front matter (after the table of contents). If you prefer not to give such a list, then you should spell out frequently used abbreviations at their first appearance in the text. Example:

Epidemiologically, coronary heart diseases (CHD) take first place. The occupancy of hospital beds with CHD patients last year was 15 %.

A sentence should never begin with an abbreviation. In some cases, e. g., for reasons of emphasis or style, nonscientific words may be spelled out rather than abbreviated in other positions:

For example, *The Chicago Manual of Style* has approximately seven hundred pages.

2.10.2 Numbers

In scientific works, numerical values, even those from 1 to 10, should be given using arabic numerals whenever a unit follows. They should be spelled out at the beginning of a sentence (though this may be avoided by recasting the sentence) and may be spelled out more generally in nonscientific or informal contexts. Please set thousands without commas, set (thin, protected) spaces between numeral triples in numbers from 10 000 upward (from 1000 upward in tables, if 5-digit numbers are included), and set decimals either as 3.142 or as 3·142.

2.10.3 Units

Note that only internationally valid symbols should be used for the units in which numerical magnitudes and quantities are given (e.g., g for grams, m for meters, s for seconds). In medical texts SI (Système International) units are standard.

2.10.4 Hard Spaces

Between parts of an abbreviation that go together, or between numbers and units, you should set not normal word spaces but protected or hard spaces that do not allow line breaks between the elements.

Examples: 10:00 AM, 9.81 m s⁻², Vol. I, p. 10, Fig. 2, et al.

2.11 Formulas

Formulas and equations are set with an indent of 4 mm or centered on separate lines with extra line spacing above and below of 2 mm.

Example:

$$(a + b)^2 = a^2 + 2 ab + b^2.$$

If the formula or equation is part of a sentence, it should normally end with the appropriate punctuation mark (comma, semicolon, colon, or period). Alternatively, displayed equations may be set without the otherwise appropriate punctuation, so long as this is done consistently throughout the work. Further details are given in Sect. 5.4.

3 Tables

Tables should be set in small type (8.5 pt, line spacing 3.5 mm). The word “Table” should not be abbreviated; in the table title it appears with the table number in **boldface** type before the title text (which is not set bold).

Please do not set simple enumerations or single-column lists as tables; set them instead as part of the running text (see Sect. 2.4).

Tables should be positioned near the textual references to them. Distance between text and table, both before and after: 8 mm. If possible, however, place tables at the top or the bottom of a page (in which cases, of course, do not set extra spaces before or after, respectively).

3.1 Example

Table 3.1. Cardiovascular parameters

| Patient No | Psyst art •HR | Psyst art maximal (mm Hg) | HR (min -1) | ECG | CHD |
|-----------------|---------------|---------------------------|-------------|------|--------|
| 5 ^a | 25038 | 214 | 214 | ES | yes |
| 8 ^b | 14220 | 237 | 60 | ES y | es |
| 14 ^a | 11350 | 165 | 111 | ES | no (?) |
| 23 ^b | 18128 | 175 | 90 | ES | yes |
| 39 ^b | 22785 | 218 | 68 | ES | yes |

p, blood pressure; *HR*, heart rate; *ECG*, electrocardiograph reading; *CHC*, preoperative diagnosis of coronary heart disease; *ES*, extrasystoles

^a Patients from group 1

^b Patients from group 2

3.2 Explanation

The table is structured by a head rule (under the heading), a cross rule (under the column headers), and a foot rule (under the columns). Spacing above and below each of these lines is 2 mm. Introduce further lines (vertical as well as horizontal) only when necessary for didactic reasons.

Set the columns flush left, but set numbers using decimal tabs so that all units, tens, hundreds, etc., are vertically aligned. Set metric or physical units in the column heads in parentheses.

Set explications of the abbreviations on the left margin under the foot rule; in this position the explicanda are set italic.

Footnotes in tables are referred to with superscript lowercase letters. Set the footnote texts directly under the table; begin them with an uppercase letter and end them with a period.

4 Illustrations

Given the sophistication of modern PC software, we assume that in most cases you will prepare your illustrations (figures) on the screen and then integrate them with the text. If you are copying illustrations from other publications we urge you to read Sect. 7.3.

To help you in creating your own illustrations and to avoid technical problems during reproduction we offer the following basic guidelines.

- Font for lettering in figures: Helvetica.
- Size of smallest capital letters: 2.6 mm (7 pt).
- Scale illustrations so that they do not overstep the print margins.
- Check the contrast levels when using shading (cross-hatching, etc.) or screened areas: any lettering on such areas must be clearly readable.
- Avoid subtle effects or fussy details like shadowing, continuous tone shading, outline letters, or unnecessary frames.

If your work includes halftone illustrations (photos), please supply us with high-contrast original prints or transparencies and leave suitable blank spaces for the illustrations in your text. Springer will arrange for these illustrations to be reproduced separately from the text and inserted later.

If you wish to include color illustrations in your work, you must first discuss this with your contact person in the company; please do so also in case you plan to supply black-and-white or four-color illustrations as digital files.

4.1 Figure Legends

Set figure legends under the figures in small type (8.5 pt, line spacing 3.5 mm) across the full width of the print area. Set the leader **Fig.** and the figure number, as well as any part designator (**a**, **b**, etc.), in boldface type, but set the legend text in plain type.

Figure lettering that is explained in the legend should be set in italic type in the legend (see Table 3.1).

4.2 Positioning the Figures in the Text (see also sample pages)

Figures should normally be set at the top or bottom of the page so as to minimize disruption of the flow of the text. For spacing above and below figures see the following example (Fig. 4.1).

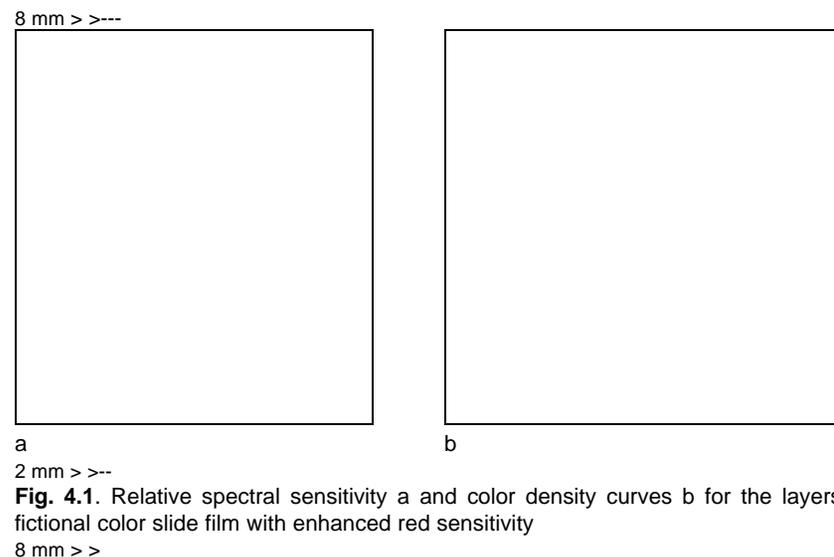


Fig. 4.1. Relative spectral sensitivity a and color density curves b for the layers of a fictional color slide film with enhanced red sensitivity

Do not set extra spacing before the figure or after the legend when the figure is positioned respectively at the top or the bottom of the page.

5 References

5.1 Citations in the Text

Literature may be cited in the text by either (but not both) of two methods: (1) by giving the author's name and the year the work was published in parentheses, or (2) by giving numbers set in square brackets. In either case, you can set the list of references in alphabetical order by author (but see Sect. 5.2). If you make changes to a numbered list, you will also have to revise all the reference numbers following the changes, as well as their citations.

Authors' initials should be given in citations only when the family name and publication year of two authors are identical. Separate two or more publication years after an author's name by commas, and entries for several authors by semicolons. Cite editors like authors.

Examples

- One author: "Indeed Miller (1950) gave advice (see also Jones 1962; Smith 1962) ..."
- One author, one co-author: "Indeed Miller and Smith (1950) gave advice (see also Miller and Jones 1962; Smith and West 1951, 1962) ..."
- One author, many co-authors: "Indeed Miller et al. (1950) gave advice (see also Jones et al. 1962; Smith et al. 1962) ..."

Note that "and" is used between two names and "et al." for three or more.

5.2 List of References

Style the heading "*References*" like a chapter title but do not number it. Set the list itself in small type (8.5 pt, line spacing 3.5 mm; Sect. 2.5) and position it at the end of the book between the text (or the appendices, if any) and the index. It should always begin on a right-hand (odd-numbered) page.

In most subject areas the cited works should be listed in alphabetical order by author. However, in some areas (e.g., chemistry) it is customary to number citations in order of their appearance in the text and list them in that order. Check with your Springer contact if you are unsure which order to use. In either case, set each item flush left, and indent second and subsequent lines by 4 mm. Do not set extra line spacing between the items.

Bibliographic Abbreviations: vol (volume), no (number), p (page), pp (pages), edn (edition), ed (editor), eds (editors)

Note that these are all set with periods in some subject areas (see Sects. 5.3 –5.7).

Journals: Input of volume and page numbers for journal articles is treated in Sects. 5.3 –5.7, journal name abbreviations in Sects. 5.3.3, 5.4.3, and 5.5.3.

Numbered Citations: The examples in Sects. 5.3 – 5.7 are of unnumbered lists; for numbered lists the numbers should stand free (i. e., the first line of text following the number should be inset 4 mm like any subsequent lines), with units, tens, hundreds aligned, and appear with a period but without square brackets. Example:

1. Arkhipenko DK, Bokiy GB (1986) Factor-groups analysis and X-ray study of vermiculite and talc crystals (in Russian). *J Struct Chem* 16: 450–457
2. Peters S, Jaffe HG (1991) Lactose synthesis and the pentose cycle. *J Biol Chem* 98: 15 –33

5.3 Examples for Styling References: Medicine, Psychology, Biology, Chemistry, Earth and Environmental Sciences, Engineering

If you would like more detailed instructions on the international standard styles used in the following examples, just ask your Springer contact.

5.3.1 Monographs

Snider T, Grand L (1982) Air pollution by nitrogen oxides. Elsevier, Amsterdam

5.3.2 Edited Works

Noller C, Smith VR (1987) Ultraviolet selection pressure on earliest organisms. In: Kingston H, Fulling CP (eds) Natural environment background analysis. Oxford University Press, Oxford, pp 211–219

5.3.3 Journal Articles

Journal names are abbreviated according to or analogous to the *Index Medicus*. If in doubt cite the full name.

Arkhipenko DK, Bokiy GB (1986) Factor-groups analysis and X-ray study of vermiculite and talc crystals (in Russian). *J Struct Chem* 16: 450–457

Peters S, Jaffe HG (1991) Lactose synthesis and the pentose cycle. *J Biol Chem* 98: 15–33

5.3.4 Special Cases (Dissertations, Reports)

Cairns RB (1965) Infrared spectroscopic studies of solid oxygen. Dissertation, University of California

US Congress, Office of Technology Assessment (1985) Status of biomedical research and related technology for tropical diseases. OTA-H-258. US Government Printing Office, Washington DC

See also the remark on numbered citations in Sect. 5.2.

5.4 Mathematics and Physics

Mathematical formulas and expressions require especially careful typographic treatment. For most situations there are conventions governing how the material should be set. We limit ourselves here to the simplest cases and would ask you to direct any further questions you may have to your contact person at Springer, who will arrange for more detailed advice from someone with expertise.

Long or complicated formulas or equations are displayed on a separate line and either centered or indented (see Sect. 2.10), with an extra line or half-line space before and after. Number formulas chapterwise and set the numbers in parentheses flush to the right margin. Example:

$$E = mc^2 \quad (2.1)$$

Propositions, lemmas, theorems, corollaries, definitions, and similar items are also numbered chapterwise and set as follows:

Definition 2.1. The set N of natural numbers is the countable set

$$N = \{0, 1, 2, \dots\}$$

Definition 2.2. The set N_+ of positive integers is the countable set

$$N_+ = \{1, 2, \dots\}$$

Theorem 2.1. *The set of natural numbers is equal to the set of nonnegative integers:*

$$N = N_+ \approx \{0\}$$

Proof. This follows directly from Definitions 2.1 and 2.2.

Note the use of boldface and italic type in Definitions 2.1 and 2.2 and Theorem 2.1 and absence of parentheses in references to them. Proofs should end with an open square set flush to the right margin. When displayed equations appear in running text, they should be set with the appropriate punctuation. Alternatively, you may set displayed equations without the otherwise appropriate punctuation, so long as you do so consistently throughout your work.

6 Supplementary Advice for Multiauthor Works

6.1 Advice for Contributing Authors

6.1.1 Contribution Headings

Font and type size of contribution title: Helvetica 14 pt bold. Set a line spacing of exactly 6 mm even when your title does not exceed one line in length.

Under the title, 8 mm below it, is a line set in type the same size as the main text giving the name(s) of the author(s). The names in the case of multiple authors are separated by commas. The address of the author(s) is set on the line following the name(s). If more than one address must be given, each address should begin on a new line, and the addresses should be linked to the corresponding names by means of superscript numerals.

The text begins 30 mm below the title in the case of one-line titles, and 24 mm below it in the case of two-line titles.

Example of a contribution heading

On Traditions in Marktoberdorf

Fred B. Schneider

Department of Computer Science, Cornell University, Ithaca, NY 14853, USA

Abstract. Origins are proposed for certain well-known traditions at the Marktoberdorf advanced courses in programming methodology. The evolution of these traditions, over the years, is also discussed.

Number headings inside the contribution using the decimal system.

6.1.2 Pagination

Since you do not know in advance which pages your contribution will occupy, you must give your printout temporary page numbers. You may do so in the top right-hand corner of the page, outside the 193 x 270 mm page outline surrounding the print area (see Sect. 1.1), by hand if necessary. Please do not make entries in the header or footer zones inside the page outline. The final pagination and the entry of any running heads will be arranged by Springer.

6.1.3 Literature Citations

The form of citations should be prescribed by the volume editor on the basis of the information given in Chap. 6. The list of references should be set at the end of the contribution as the last main section – *not* on a new page.

6.1.4 Figures, Tables and Formulas

Figures, tables, and formulas are respectively numbered from 1 in each contribution. Figures and tables should be placed consistently either on the left margin or centered. If your work contains many small figures, centering them may be best; otherwise we recommend setting them on the left margin. (Formulas, however, should not be set on the left margin; see Sects. 2.10 and 6.4.) On spacing before and after, see sample pages.

7 Legal Remarks

7.1 Tradenames

If your book or contribution contains registered tradenames or trade marks, it is advisable to include a note of the fact that these names or marks are registered by the relevant firms or institutions. This note can appear in the preface or the acknowledgements or on the copyright page.

Example: T_EX is a registered trade mark of the American Mathematical Society.

7.2 Product Liability

The laws on product liability make great demands on the accuracy required of all those occupied with and involved in the compilation, reproduction, and distribution of manuscripts.

This also applies in particular to authors of scientific and technical books and journal articles. For this reason, please check your work carefully when writing it and when reading the final proof. It is necessary, and in your own interest, to ensure that all the information presented in your work is accurate and that all pertinent information is included (e.g., on risks or precautions).

When preparing the manuscript, you can simplify this task by having the contents counterchecked by colleagues who are experts in the field; the extent to which you will have to do this varies according to the degree of risk of material damage and injury to persons that might result from incorrect information.

This is the safest way to reduce your liability risk and to prevent any possible claims for compensation and damages.

7.3 Use of Illustrations

If you wish to include an illustration from another publication in your work, you must obtain permission from the owner of the rights to the illustration – generally the publisher of the work that includes it. A

form letter for this purpose may be obtained from your contact person at Springer. You must then include a suitable acknowledgement in the figure legend for the illustration. You should either give complete details of the original publication or simply give the name of the owner and give complete details in the list of references or in a list of figure sources.