

L^AT_EX Author Guidelines for AGIT Proceedings Manuscripts

J. Scholz^{1,2} and F. Welscher²

¹Paris-Lodron-University Salzburg & Spatial Services GmbH, Austria

²Graz University of Technology, Institute of Geodesy, Austria

Abstract

The ABSTRACT is to be in fully-justified italicized text, between two horizontal lines, in one-column format, below the author and affiliation information. Use the word “Abstract” as the title, in 9-point Times, boldface type, left-aligned to the text, initially capitalized. The abstract is to be in 9-point, single-spaced type. The abstract may be up to 3 inches (7.62 cm) long.

1. Introduction

Please follow the steps outlined in this document very carefully when submitting your manuscript to AGIT.

You may as well use the L^AT_EX source as a template to typeset your own paper. In this case we encourage you to also read the L^AT_EX comments embedded in the document.

AGIT uses the EasyChair Online Review System to peer review manuscript submissions. A manuscript submission will be considered on the strict condition that

- the manuscript is your own original work, and does not duplicate any other previously published work, including your own previously published work
- the manuscript has been submitted only to AGIT and is not under consideration or peer review or accepted for publication or in press or published elsewhere
- all rights for images have been taken care of by the authors
- the manuscript contains nothing that is abusive, defamatory, obscene, fraudulent, or illegal under Austrian law
- the manuscript is in English or German language

You must obtain written permission from the copyright owner prior to submission for any material in your manuscript for which you do not hold copyright. Such material may be in the form of text, data, table, illustration, photograph, line drawing, audio clip, video clip, film still, and screenshot, and any supplemental material you propose to include. This applies to direct (verbatim or facsimile) reproduction as well as “derivative reproduction”, i.e. where you have created a new figure or table, which derives substantially from a copyrighted source. You must ensure that appropriate acknowledgment is given to the permission granted to you for reuse by the copyright holder in each figure or table caption. You are solely responsible for any fees, which the copyright holder may charge for reuse. The reproduction of short extracts of text, excluding poetry and song lyrics, for the purposes of criticism may be possible with-

out formal permission on the basis that the quotation is reproduced accurately and full attribution is given.

2. Instructions

Please read the following carefully.

2.1. Submission Categories

Short-paper track

2000 to 3000-word manuscripts of original and unpublished research work as well as high-quality scientific and strategic (industrial and governmental) submissions will be accepted for presentation at the AGIT conference and published open-access in the AGIT conference series Journal (of University Library of PLUS). Each submission will be reviewed by members of the Program Committee.

After the conference, selected short papers will be invited by the Program Committee to submit a Full Paper to a special issue of the journal *gis.Science* (<https://gispoint.de/gis-science/zeitschrift.html>). The SI will be published in October 2026.

Abstract track

Abstracts can be submitted as Extended Abstracts (400-600 words) using the EasyChair system (unformatted). All abstracts will be reviewed by the General Chairs and the Program Committee. In the submission process, please indicate if your submission is intended for

- a poster
- or a short presentation (pitch): this can contain reports, work in progress (workbench reports), or already finished (more applied) projects.

Both submission categories will be published using the open-access publication server of the Paris-Lodron-University Salzburg

<https://eplus.uni-salzburg.at/obvusboaz>, with a DOI identifier.

2.2. Submission Instructions

All short paper submission to AGIT should follow the instructions for authors and use the AGIT L^AT_EX template. The AGIT review process is double-blind, so please do not include any identifying information in the paper PDF. Authors who are unfamiliar with L^A-T_EX, but keen to try, are highly encouraged to use Overleaf, an on-line L^AT_EX editor that is easy to use and does not require any local installation. Overleaf comes with the AGIT template pre-loaded. Authors who want to use other text editors should stay close to the sample article's layout for their paper submitted for review. Should their papers be accepted for publication, they have to be converted to L^AT_EX using the AGIT template. Authors are responsible for the conversion of their papers to L^AT_EX.

- Short papers should be submitted as PDF via EasyChair system using the Overleaf Template (<https://easychair.org/my2/conference?conf=agit26>)
- Abstracts can be submitted using EasyChair directly and unformatted ((<https://easychair.org/my2/conference?conf=agit26>)).

2.3. Language

All manuscripts must be in English or German language. In order to use German language please uncomment `%GERMAN Language support %\usepackage[ngerman]{babel}` in line 34.

2.4. Margins and page numbering

All printed material, including text, illustrations, and charts, must be kept within a print area 17.7 cm wide by 24 cm high. Do not write or print anything outside the print area. Number your pages on odd sites right above, on even sites left above, no page number on the first site. Do not use page numbering within the final version of your paper.

2.5. Formatting your paper

All text with the exception of the abstract must be in a two-column format. The total allowable width of the text area – including header and footer lines – is 177 mm wide by 245 mm high.

Columns are to be 84 mm wide, with a 8 mm space between them.

The space between the header line and the first line of the text body and between the last line of the text body and the footer line is 5 mm each.

2.6. Type-style and fonts

Wherever Times is specified, Times Roman may also be used. If neither is available on your word processor, please use the font closest in appearance to Times that you have access to. Only Type-1 fonts will be accepted.

MAIN TITLE. The title should be in Times 17-point, boldface type and centered. Capitalize the first letter of nouns, pronouns, verbs, adjectives, and adverbs; do not capitalize articles, coordinate conjunctions, or prepositions (unless the title begins with such a word). Leave two blank lines after the title.

AUTHOR NAME(s) and AFFILIATION(s) are to be centered beneath the title and printed in Times 9-point, non-boldface type. This information is to be followed by two blank lines.

The **ABSTRACT** is to be in a one-column format. The **MAIN TEXT** is to be in a two-column format.

MAIN TEXT. Type main text in 9-point Times, single-spaced. Do *not* use double-spacing. All paragraphs should be indented 1 em (the length of the dash in the actual font). Make sure your text is fully justified – that is, flush left and flush right. Please do not place any additional blank lines between paragraphs. Figure and table captions should be 9-point Times boldface type as in Figure 2.

Long captions should be set as in Figure 1 or Figure 3.

Figure 1: 'Empty' figure only to serve as an example of long caption requiring more than one line. It is not typed centered but aligned on both sides.

Figures which need the full textwidth can be typeset as Figure 3.

Callouts should be 9-point Times, non-boldface type. Initially capitalize only the first word of section titles and first-, second-, and third-order headings.

FIRST-ORDER HEADINGS. (For example, **1. Introduction**) should be Times 9-point boldface, initially capitalized, flush left, with one blank line before, and one blank line after.

SECOND-ORDER HEADINGS. (For example, **2.1. Language**) should be Times 9-point boldface, initially capitalized, flush left, with one blank line before, and one after. If you require a third-order heading (we discourage it), use 9-point Times, boldface, initially capitalized, flush left, preceded by one blank line, followed by a period and your text on the same line.

The headline (*authors / title*) must be shortened if it uses the full two column width of the main text. There must be enough space for the page numbers. Please use “et al.” if there are more than three authors and specify a shortened version for your title.

2.7. Footnotes

Please do *not* use footnotes at all!

2.8. References

List all bibliographical references in 9-point Times, single-spaced, at the end of your paper in alphabetical order. When referenced in the text, enclose the citation index in regular brackets, for example (Lous, 1990). Where appropriate, include the name(s) of editors of referenced books.

For your references please use the following algorithm:

- **one** author: Lastname, Year – e.g. (Lous, 1990)
- **two, three, four** or **five** authors: Lastnames of the authors (divided by ", " or &) and Year – e.g. (Fellner & Helmberg, 1993) or (Kobbelt, Stamminger, & Seidel, 1997) or (Lafortune, Foo, Torrance, & Greenberg, 1997) or (Buhmann, Fellner, Held, Ketterer, & Puzicha, 1998)
- **more than 5** authors: Lastname of first author followed by "et al., Year". e.g. (Mai et al., 2022).
- For

The most important citation commands are as follows:

- For citations in parenthesis, like (Lous, 1990), use the command `\cite{bibid}`.
- For in-text citations, like Lous (1990), use the command `\citeA{bibid}`

For both citation commands, you can use additional prefixes (like e.g.) or include the page number - like (e.g., Lous, 1990, p. 11) - with the command `\cite[e.g.,>[p.~11]]{bibid}`.

For BibTeX users, please use the provided style file `apacite` which implements the above algorithm (for more information on the `apacite` package please refer to the documentation <https://ctan.math.illinois.edu/macros/latex/contrib/apacite/apacite.pdf>). A sample `bibsample.bib` file is available that is required to provide the bibliographic data for the paper.

2.9. Illustrations, graphs, and photographs

All graphics should be centered.



For all figures please keep in mind that you **must not** use images with transparent background!

Figure 2: Here is a sample figure.

If your paper includes images, it is very important that they are of sufficient resolution to be faithfully reproduced.

To determine the optimum size (width and height) of an image,

measure the image's size as it appears in your document (in millimeters), and then multiply those two values by 12. The resulting values are the optimum x and y resolution, in pixels, of the image. Image quality will suffer if these guidelines are not followed.

Example 1: An image measures 50 mm by 75 mm when placed in a document. This image should have a resolution of no less than 600 pixels by 900 pixels in order to be reproduced faithfully.

Example 2: Capturing a screenshot of your entire 1024×768 pixel display monitor may be useful in illustrating a concept from your research. In order to be reproduced faithfully, that 1024×768 image should be no larger than 85 mm by 64 mm (approximately) when placed in your document.

2.10. Color

Please observe: as of 2003 publications in the proceedings of the Eurographics Conference can use color images throughout the paper. No separate color tables are necessary.

However, workshop proceedings might have different agreements! Figure 3 is an example for creating color plates.

2.11. Embedding of Hyperlinks / Typesetting of URLs

Due to the use of the package `hyperref` the original behavior of the command `\url` from the package `url` is not available. To circumvent this problem we either recommend to use the command `\httpAddr` from the included package `egweblnk` (see below) or to replace the command `\url` by the command `\webLink` – e.g. in cases where `\url` has been used widely in BibTeX-References. In the latter case we suggest to run BibTeX as usual and then replace all occurrences of `\url` by `\webLink`

The provided commands for hyperlinks, in a nutshell, are:

```
\httpAddr {URL without leading 'http:'}
  e.g. http://diglib.eg.org/EG/DL/WS

\ftpAddr {URL without leading 'ftp:'}
  e.g. ftp://www.eg.org/EG/DL/ftpupload

\URL {url}
  e.g. http://www.eg.org/EG/DL/WS

\MailTo {Email addr}
  e.g. publishing@eg.org

\MailToNA {emailName}{@emailSiteAddress}
  e.g. publishing@eg.org

\webLink{URL without hyperlink creation}
  e.g. http://www.eg.org/some\_arbitrary\_long/but\_useless/URL
```

2.12. PDF Generation

If you use Overleaf www.overleaf.com to generate your PDF, you can neglect the following description, due to the fact that Overleaf produces the PDF with the desired options automatically. Hence, we strongly recommend to use the Overleaf platform with the provided template.

Your final paper should be delivered as a PDF document with all typefaces embedded. L^AT_EX users should use `dvips` and `ps2pdf` to create this PDF document. Adobe Acrobat Distiller may be used in place of `ps2pdf`.

Adobe PDFWriter is *not* acceptable for use. Documents created with PDFWriter will be returned to the author for revision. `pdf-tex` and `pdflatex` (and its variants) can be used only if the author can make certain that all typefaces are embedded and images are not downsampled or subsampled during the PDF creation process.

Users with no access to these PDF creation tools should make available a PostScript file and we will make a PDF document from it.

The PDF file *must not* be change protected.

Configuration Notes: `dvips` / `ps2pdf` / etc.

`dvips` should be invoked with the `-Ppdf` and `-G0` flags in order to use Type 1 PostScript typefaces:

```
dvips -t a4 -Ppdf -G0 -o my.ps my.dvi
```

If you are using version 7.x of GhostScript, please use the following method of invoking `ps2pdf`, in order to embed all typefaces and ensure that images are not downsampled or subsampled in the PDF creation process:

```
ps2pdf -dMaxSubsetPct=100 \
-dCompatibilityLevel=1.3 \
-dSubsetFonts=true \
-dEmbedAllFonts=true \
-dAutoFilterColorImages=false \
-dAutoFilterGrayImages=false \
-dColorImageFilter=/FlateEncode \
-dGrayImageFilter=/FlateEncode \
-dMonoImageFilter=/FlateEncode \
mypaper.ps mypaper.pdf
```

If you are using version 8.x of GhostScript, please use this method in place of the example above:

```
ps2pdf -dPDFSETTINGS=/prepress \
-dCompatibilityLevel=1.3 \
-dAutoFilterColorImages=false \
-dAutoFilterGrayImages=false \
-dColorImageFilter=/FlateEncode \
-dGrayImageFilter=/FlateEncode \
-dMonoImageFilter=/FlateEncode \
-dDownsampleColorImages=false \
-dDownsampleGrayImages=false \
mypaper.ps mypaper.pdf
```

Configuration Notes: `pdftex` / `pdflatex` / etc.

Configuration of these tools to embed all typefaces can be accomplished by editing the `updmap.cfg` file to enable inclusion of the standard (or base) 14 typefaces.

Linux users can run the `updmap` script to do this:

```
updmap -setoption pdftexDownloadBase14 true
```

Windows users should edit the `updmap.cfg` files found in their TeX installation directories (one or both of the following may be present):

```
INSTALLDIR\texmf\web2c\updmap.cfg
INSTALLDIR\localtexmf\miktex\config\updmap.cfg
```

Ensure the value for `pdftexDownloadBase14` is "true," and then follow the instructions found here: <http://docs.miktex.org/manual/> to update your MikTeX installation.

Configuration Notes: Acrobat Distiller

We recommend to use a Distiller job options file that embeds all typefaces and does not downsample or subsample images when creating the PDF document.

2.13. Conclusions

Please direct any questions to office@gi-salzburg.org or johannes.scholz@plus.ac.at.

References

- Buhmann, J. M., Fellner, D. W., Held, M., Ketterer, J., & Puzicha, J. (1998, September). Dithered color quantization. *cgforum*, 17(3), C219-C231. ((Proc. Eurographics'98) <http://diglib.eg.org/EG/CGF/volume17/issue3/ColQuant98>) doi: 10.1111/1467-8659.00269 3
- Fellner, D. W., & Helmberg, C. (1993, July). Robust rendering of general ellipses and elliptical arcs. *tog*, 12(3), 251-276. doi: 10.1145/169711.169704 3
- Kobbelt, L., Stamminger, M., & Seidel, H.-P. (1997). Using subdivision on hierarchical data to reconstruct radiosity distribution. *cgforum*, 16(3), C347-C355. ((Proc. Eurographics'97) <http://diglib.eg.org/EG/CGF/volume16/issue3/CGF172.html>) doi: 10.1111/1467-8659.16.3conferenceissue.36 3
- Lafortune, E. P., Foo, S.-C., Torrance, K. E., & Greenberg, D. P. (1997). Non-linear approximation of reflectance functions. In *Proc. siggraph '97* (Vol. 31, p. 117-126). doi: 10.1145/258734.258801 3
- Lous, Y. L. (1990, December). Report on the First Eurographics Workshop on Visualization in Scientific Computing. *cgforum*, 9(4), 371-372. doi: 10.1111/j.1467-8659.1990.tb00430.x 2, 3
- Mai, G., Hu, Y., Gao, S., Cai, L., Martins, B., Scholz, J., ... Janowicz, K. (2022). Symbolic and subsymbolic geospatial knowledge graphs and spatially explicit machine learning. *Transactions in GIS*, 26(8), 3118-3124. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/tgis.13012> doi: <https://doi.org/10.1111/tgis.13012> 3



Figure 3: For publications with color tables (i.e., publications not offering color throughout the paper) please **observe:** for the printed version – and **ONLY** for the printed version – color figures have to be placed in the last page. For the electronic version, which will be converted to PDF before making it available electronically, the color images should be embedded within the document. Optionally, other multimedia material may be attached to the electronic version.