PROCEEDINGS OF SCIENCE

PoS author manual

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This manual explains the use of the PoS LaTeX style file and of the word processing template file for authors submitting their contributions to PoS — Proceedings of Science conference proceedings.

WARNING: *if you have already published in PoS in the past, please do not reuse the old files, but only the specific one for the present conference.*

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1. General

Authors of conferences that publish their proceedings in PoS are required to prepare their contributions in the PoS style following the instructions of this manual.

We ask authors to submit their contributions in PDF format, but they are free to create them in their preferred way.

Authors can download all the files required to prepare their contribution by logging-in to PoS and visiting the conference *Workarea* to download the ZIP file **PoS template files and style guidelines**. This manual provides directions for the preparation of a contribution via LaTeX (our preferred method) or with the help of a word-processor such as LibreOffice or Microsoft Word.

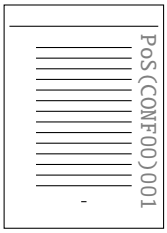
Please note that PDF files submitted to PoS will not be modified by the Editorial Office and no further typesetting will be applied. If your file does not respect the PoS style, you will be requested to resubmit it. However, the Editorial Office is always happy to provide help.

> ***WARNING:*** *if you have already published in PoS in the past, please do not use the old files (LaTeX style, template, . . .), but only those for the present conference, because they are not the same.*

1.1 Page size and margins

To ensure consistency in presentation format, all conference papers are expected to be formatted in portait A4 paper size (the templates are already set to the correct format). Please do not change this.

When you submit your pdf file to PoS, a watermark containing the official PoS identification number will be automatically added on the right hand side of the page. So please do not modify the page width and do not write on the margins. See the example on the right hand side; the watermark there is "PoS(CONF00)001".



1.2 Images and graphics colors

We recommend referring to the CTAO's Best Practices for Colour Blind Friendly Publications and Descriptions published by Cherenkov Telescope Array Observatory to format images and diagrams in a way that makes them accessible to people with color blindness.

1.3 Required data

All the contributions need to bear the following metadata on the title page:

- the *title* of the contribution (and possibly a *Short title* for the running head)
- the *full name* of all the authors (abbreviating the first name is ok) and their *affiliations*

- the *email* address of each author
- the *speaker*: one of the authors should be identified as "Speaker"
- the *abstract* of the contribution
- the *full conference title, date and venue*

1.4 Contribution metadata

When you upload your PDF submission, be sure to also load the abstract and the list of co-authors (the same ones listed within the PDF). Otherwise, the submission may be indexed by search engines as if it had only the first author.

2. Formatting for LaTeX users

Please save the files `pos.sty` and `PoSlogo.pdf`[1] in the same directory as your source file. Please also note that `pos.sty` relies on the `newtx` bundle, so a relatively recent LaTeX distribution is required (2016 onward).

2.1 The title page

The general structure of the title page is as follows (see the `skeleton.tex` file):

```
\documentclass[a4paper,11pt]{article}
\usepackage{pos}

\begin{document}

\title{An example title where $x=1$}
%% \ShortTitle{...}

\author*[a]{First Author}
\author[a,b]{Second Author}

\affiliation[a]{Institution,\\ Street number, City, Country}
\affiliation[b]{Department, University,\\ Street number, City, Country}

\emailAdd{f.author@inst.edu}
\emailAdd{s.author@univ.country}

\abstract{...}

\FullConference{Conference name\\
  venue\\
  date
}

%% \tableofcontents

\maketitle

...

\end{document}
```

Title. Please use the macro `\title{}`. The full stop at the end of the title is usually *not* needed. Only peolple's names, the first letter of the title and acronyms are capitalized; all the rest should be lower case.

Short title (optional). Usually the title of the contribution appears in the running head. If the title is very long please use the macro `\ShortTitle{}` to set a different or simpler header.

Abstract. Please use the macro `\abstract{}`.

[1] Use `PoSlogo.ps` instead if you use `latex` and want to produce a `dvi` file.

E-mails. All authors usually appear on the first page of the contribution with their e-mail address. Each e-mail address can be specified using the macro `\emailAdd{}`. If the e-mail address contains an underscore, please escape it (e.g.: `\emailAdd{a\_b@uni.org}`). Please add only one e-mail per author and add them in the same order as the authors. For authors list comprising more that a dozen authors, only the email of the corresponding author can be reported, the others can be omitted.

Conference name. You should find the macro `\FullConference{}` already filled in the skeleton file provided on your author page. The macro should contain the conference name, the venue and the date on three different lines. Usually there is no need to change it.

Dedication (optional). Please use the macro `\dedicate{}` if you want to add a small dedication on the first page. This is usually done only on very special circumstances.

2.2 Authors and affiliations

Typesetting authors and affiliation is probably the most delicate part of compiling the first page of a PoS contribution.

In general, all authors should appear on the title with their full name and affiliation at the time of the preparation of the contribution. We use the macros `\author[]{}` and `\affiliation[]{}`. Their basic usage is described in figures 1 and 2. The author name is specified in the curly brackets while the symbol in the square brackets is used to label the name and link it to the corresponding institution (affiliations).

First Author,[a] **Second Author**[b] **and Third Author**[a,b]

[a] Institution,
Street number, City, Country

[b] University,
Street number, City, Country

```
\author[a]{First Author}
\author[b]{Second Author}
\author[a,b]{Third Author}

\affiliation[a]{Institution,\\
  Street number, City, Country}
\affiliation[b]{University,\\
  Street number, City, Country}
```

Figure 1: Three authors and two institutions. The last author is affiliated to both institutions.

First Author, Second Author and Third Author

Institution,
Street number, City, Country

University,
Street number, City, Country

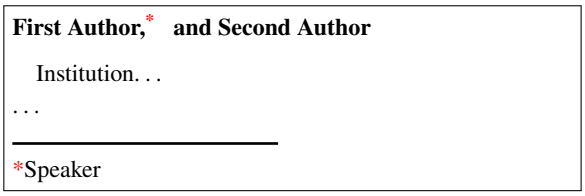
```
\author{First Author}
\author{Second Author}
\author{Third Author}

\affiliation{Institution,\\
  Street number, City, Country}
\affiliation{University,\\
  Street number, City, Country}
```

Figure 2: If all the authors are affiliated to every institution, there is no need for any label.

Speaker. It is important to indicate the speaker who presented the paper at the conference. Please use the "starred" version of the macro `\author*{}`. Multiple speakers are ok. Please note that speakers are identified by a "$*$" near their name and a footnote is added at the bottom of the title page (figure 3).

Speakers also appear in the right-hand side of the running head of all pages. To manually set the authors in the runnig header please use:

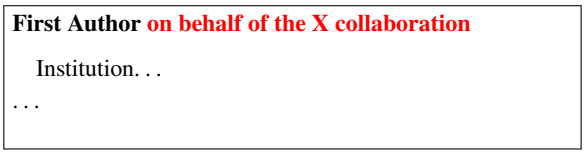
```
\renewcommand{\printHeadAuthors}{Me et al.}
```




```
\author*{First Author}
\author{Second Author}
\affiliation{Institution...
```

Figure 3: To identify the speaker, please use the macro `\author*`.

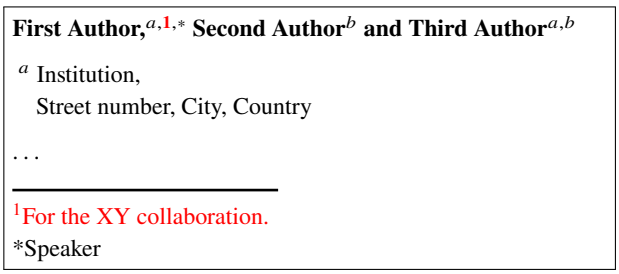
On behalf of. The `\onbehalf{}` macro can be used whenever an author writes on behalf of a working group or collaboration.




```
\author{First Author}
\onbehalf{on behalf of the X
collaboration}
\affiliation{Institution...
```

Figure 4: To add on behalf after the author list, please se `\onbehalf`.

Notes. Footnotes to authors can be added in two steps. First use the macro `\note{}` to add a new footnote in the first page, then manually set the footnote mark in the optional argument of `\author[here]{}` as shown in figure 5.




```
\author*[a,1]{First Author}
\author[b]{Second Author}
\author[a,b]{Third Author}
\affiliation[a]{Institution,\\
  Street number, City, Country}
\note{For the XY collaboration.}
```

Figure 5: To add footnotes to the authors, please use the macro `\note` and manually add the footnote mark to any author that needs it.

2.3 The paper body

In general, you do not need to follow any strict rules. Just avoid changing the package settings such as section styles, headers, fonts, etc. For figures and tables, please always put the caption *below* the figure / table to keep this style uniform throughout the proceedings.

Some macros are provided for your convenience:

\appendix switches the section numbering to letters instead of numbers

\acknowledgments produces a title for the common acknowledgments section (usually placed at the end of the paper)

For a more detailed help on the use of LaTeX you can refer to standard books such as [1] or the all-inclusive [2], or online resources like [3].

2.4 The bibliography

We strongly suggest to typeset your bibliography in "number-format" and add authors names, with initials, in roman character, title in italic, journal references and, if applicable, DOI and arXiv references (in brackets when the paper has also been published).

Here is an example for an *article*:

[3] F. Baggins, *Quantum effects of the One Ring*, *JHEP* **01** (3021) 006 [hep-th/2001033].

```
F. Baggins,
\emph{Quantum effects of the One Ring},
\href{https://doi.org/10.0000/3021006}
     {\emph{JHEP} \textbf{01} (3021) 006}
[{\tt hep-th/2001033}].
```

For *books* please add the publisher (the location optional) and year of publication:

[12] B. Baggins, *There and back again*, Imladris Editions, Rivendell 3018.

```
B. Baggins,
\emph{There and back again},
Imladris Editions, Rivendell 3018.
```

For contibutions to collective volumes (such as books or conference *proceedings*) please put both the title of the article and the title of the collection:

[16] F. Baggins, *I will take the ring*, in proceedings of *Elrond Council*, Imladris Editions, Rivendell 3021.

```
F. Baggins,
\emph{I will take the ring},
in proceedings of \emph{Elrond Council},
Imladris Editions, Rivendell 3021.
```

2.4.1 Bibtex

If you have your bibliographic records in bib format, we suggest to use the style file JHEP.bst.

Once the bst file has been downloaded in the same directory of your tex source, the procedure is, for instance:

- add the following at the end of your source file:

```
\bibliographystyle{JHEP}
\bibliography{my-bib-database}
```

- let `latexmk` compile and generate the bibliography for you:

```
latexmk -pdf skeleton
```

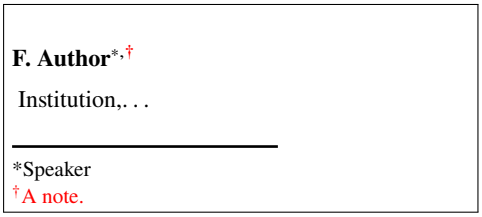
biblatex. We do not provide a biblatex style at the moment, but feel free to use anything that comes close to the above indications.

2.5 Tips & tricks

Custom running head the running head on pages other than the first is composed by the title (in the left hand side) and the name of the speaker (in the right hand side). You can customize the first with the macro `\ShortTitle{}`. If you really want to customize the second, you can use `\renewcommand{\printHeadAuthors}{Custom code}`.

Multiple speakers please use the macro `\author*{}` for all authors that should be marked as "Speaker" (instead of just `\author{}` without the "`*`")

Notes before the speaker note additional notes are usually typeset before the speaker's footnote and they use numbers as footnote-marks. If you place them inside the macro `\notes{}` they will be set after the speaker note and they will use footnote symbols as marks.

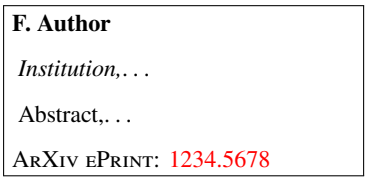



```
\author*[\dag]{F. Author}
\notes{\note{A note.}}
\affiliation{Institution,...
```

Notes with custom marks the symbol used as mark by the macro `\note{}` can be manually set in the optional argument of the macro (`\note[$\diamondsuit$]{...}`). If you mix notes with and without a custom mark, please carefully check the result

Table of contents please note that the macro `\tableofcontents` has been redefined to typeset the TOC surrounded by horizontal rules. If you need to show a TOC, please place the macro `\tableofcontents` before `\maketitle`.

arXiv number (aka eprint number) can be shown on the first page by adding the following fragment before `\maketitle`:




```
\renewcommand{\hookAfterAbstract}{%
  \par\bigskip
  \textsc{ArXiv ePrint}:
  \href{https://arxiv.org/abs/1234.5678}{1234.5678}
}
```

preprint services you are free to submit your PoS manuscript to any preprint service (e.g. arXiv), the copyright of contributions published in PoS stays with the authors. It is preferable if you post a version which does not include the PoS logo. To accomplish this, please add the following code:

```
\renewcommand{\logo}{\relax}
```

2.6 The production of PDF

As a PoS author, you are requested to submit a PDF file, not the `.tex` source. Please remember that the paper format of your contribution must be **A4** and *not* letter. If this is not so, you will be asked to re-submit your contribution.

2.7 Troubleshooting

2.7.1 Old LaTeX distributions

The PoS package `pos.sty` relies on some LaTeX features (LaTeX3 programming layer and newtx bundle) that are not available in older distributions. It is thus necessary that you use a relatively recent LaTeX distribution (at least since 2016).

If, for any reason, you cannot obtain a working environment, please try to use some online service such as Overleaf where you can freely register, create a new project and upload `skeleton.tex`, `pos.sty` and `PoSlogo.pdf` (these files can be found in the "template files" zip archive downloadable from your author pages on the PoS web site). We also maintain an Overleaf template that one can use as starting point.

3. Formatting for word-processing users

We provide an odt file (PoS-template.odt) that you can use to prepare your contribution with most word-processing softwares (such as Open/Libre Office or MS Word). Please insert the metadata and the text of the paper without altering the style, in particular for the first page. Please verify that the e-mail addresses are not typeset in italic and that the footnotes are correctly numbered.

3.1 The title page

In the title page you will find that the field with the full conference data, being the same for all the contributions of the conference, has been prepared for you.

All you need do is write your metadata in the places where you find "Title", "Author", "Affiliation", "e-mail" and "Abstract".

The speaker must be indicated by a footnote "Speaker." (usually only one among authors).

If necessary, to adjust the style, highlight the words you want to set and select the appropriate style from the appopriate style menu, usually in the upper left part of your word processor window:

This is the correct way to obtain that the article respects the PoS style.

For example on the first page you can select styles like the following:

`BodyTitle` is the style to be selected when writing the title of the paper;

`BodyAuthor` is for the name of the author;

`BodyContact` to be used in the affiliation

`BodyAbstract` for the email address.

and so on for the other parts of the document.

3.2 The paper body

All pages bear a header which must contain the title of the paper (possibly abbreviated), on the left hand side in italic, and the name of the speaker, on the right hand side in normal character. In the template you will find in these places "Short title" and "Speaker name".

To write the body of your paper you should always use the appropriate style, to be selected as shown in the previous figure. There are styles for section headings (automatically numbered), for the footnotes, for the text body. For instance:

`Normale POS` for normal text;

`Heading 1` for section titles;

`Heading 2` for subsection titles.

It is very important that you do not alter the layout (page size, spacings), nor the font. In this way all the contributions of the conference will look similar.

3.3 The bibliography

For the bibliography please see the rules and examples detailed in 2.4.

3.4 Producing a PDF

Generally, your word processor will provide a function to export the file as PDF or you can try to print the document to a PDF file ("File"→"Print"→"Print to file"→"Save as PDF").

Please remember that the paper format of your contribution must be **A4** and *not* letter. If this is not so, you will be asked to re-submit your contribution.

References

[1] L. Lamport, *LaTeX: a document preparation system: user's guide and reference manual*, Addison-Wesley, Reading 1994.

[2] M. Goossens, F. Mittelbach and A. Samarin, *The LaTeX companion*, Addison Wesley, Reading 1994.

[3] T. Oetiker, H. Partl, I. Hyna and E. Schlegl, *The not so short introduction to LaTeX2ε*, lshort.pdf.