

# Setting abstracts for the INP Greifswald \*

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## 1 Introduction

The class *inp-abstract* can be used for abstracts prepared for conferences organised by the INP Greifswald. The text will be set in two columns with a header reaching over both. The header contains the title, a list of authors, their affiliations and a résumé.

Depending on which conference the abstracts are intended for, they might be collected in a book, which will be handed to the participants. Abstracts may be written using L<sup>A</sup>T<sub>E</sub>X or Microsoft Word. To ensure that they look consistently, the class *inp-abstract* implements the layout requirements for L<sup>A</sup>T<sub>E</sub>X-users.

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An example (*inp-abstract-example.tex*) is distributed together with the class file (*inp-abstract.cls*) and this manual. The layout requirements are explained in the example.

## 2 Layout

### 2.1 Page layout, margins

The paper size used is A4. The margins are:

- top, bottom: 2.5 cm
- left, right: 2 cm

The parts of the head use wider margins:

- title, authors and affiliations: left, right: 2.5 cm
- résumé: left, right: 3.5 cm

The main text is set in two columns with a column separation of 0.5 cm.

### 2.2 Font(s)

#### 2.2.1 Default font

This part is a little bit tricky! The abstracts are required to be set in Times New Roman eventually. This should be no problem for people working with Microsoft Word, but may be one for people using other software to process texts. As a workaround the *inp-abstract* class uses Nimbus Roman as main font. This freely available font has metrics which are “almost identical to Times and Times New Roman”<sup>1</sup>.

As mentioned above the abstracts may be collected in a book. When abstracts are contributed as L<sup>A</sup>T<sub>E</sub>X files *and* not using Times New Roman, part of the preparation of the book will be to set these abstracts again, this time with Times New Roman. To avoid problems at this step the *inp-abstract* class loads a font as similar as possible.

This means that the abstract you send in does not have to use Times New Roman, but in this case we will process it another time. For that reason you are asked to provide the source file as well as the PDF-file.

If you want to use Times New Roman from the start you can do so by loading it with the help of the *fontspec* package:

```
\usepackage{fontspec}
\setmainfont{Times New Roman}
```

Note that *fontspec* can only be used with X<sub>Y</sub>L<sup>A</sup>T<sub>E</sub>X or Lua<sub>T</sub><sub>E</sub>X and that the source file has to be encoded in UTF-8.

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<sup>1</sup>Source: [https://en.wikipedia.org/wiki/Nimbus\\_Roman\\_No.\\_9\\_L](https://en.wikipedia.org/wiki/Nimbus_Roman_No._9_L)

### 2.2.2 Font sizes and justification

The parts of the document are set with the following fonts:

- main text: 11 pt, normal, justified left and right
- title: 14 pt, bold, centered
- authors: 12 pt, normal, centered
- affiliations: 10 pt, italic, centered
- figure and table captions: centered
  - label: 10 pt, normal
  - text: 10 pt, italic
- headings: flushed left
  - section: 12 pt, bold
  - subsection: 11 pt, bold
  - subsubsection: 11 pt, bold

## 2.3 Figures and tables

The environments *figure* and *table* are redefined – they do not float any more but just center their content. This was done, because the *multicol* package, which is used to switch from one column to two column setting, doesn't allow floats. Additionally floats are considered unnecessary due to the fact that the abstracts may not have more than one page.

## 2.4 Equations

Equations are centered. Their numbers are put in parenthesis at the right-hand margin of the column.

# 3 Usage

The easiest way to use the class is to put the class file *inp-abstract.cls* into the same folder as the source file of your abstract and load it like any other class with `\documentclass{inp-abstract}`<sup>2</sup>. Because the paper size, margins, font size etc. are defined, there are no options. Internally the *article* class is loaded with the options *a4paper* and *11pt*.

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<sup>2</sup>Currently we are not planning to automate the installation of the class with the help of an INS file or by publishing the *inp-abstract* class to CTAN. So if you want to add the class to your T<sub>E</sub>X installation please refer to the corresponding sources.

### 3.1 Parts of the head

The head consists of four parts: the title, names of the authors, their affiliations and a short résumé. They have to be used in the preamble, i.e. before `\begin{document}`, and are set automatically, it is not necessary to use the *titlepage* environment or `\maketitle`.

`\title`  
`\resume`

The command `\title{<title>}` takes the title as parameter.

Likewise the résumé is handed over to the command `\resume{<resume>}`.

#### 3.1.1 Authors and affiliations

The names of the authors and their affiliations are set with the help of the package *authblk*. Here it can be used in two ways:

`\author`  
`\affil`

1. Authors and their affiliations are associated by their order:

```
\author{<author1.1>}  
\author{<author1.2>}  
\affil{<affil1>}  
\author{<author2.1>}  
\author{<author2.2>}  
\affil{<affil2>}
```

2. Authors and their affiliations are associated by markers:

```
\author[1]{<author1.1>}  
\author[2]{<author2.1>}  
\author[1]{<author1.2>}  
\author[2]{<author2.2>}  
\affil[1]{<affil1>}  
\affil[2]{<affil2>}
```

In both cases the authors are set in the same order as they are entered in the source.

`\mainauthor`

If you want to emphasize one or more authors as the main author(s), you can do so by using `\mainauthor{<main author>}`, which underlines the author's name. The main author has then to be entered like this:

```
\author{\mainauthor{<main author>}}
```

### 3.2 Headings

The value of *secnumdepth* is set to 3, which means sections, subsections and subsubsections will be numbered. Headings below this can be used, but will have no numbers.

### 3.3 Captions

The *inp-abstract* class offers two commands for adding captions to figures and tables:

<code>\figurecaption</code>	• <code>\figurecaption{\langle Caption for a figure \rangle}</code>
<code>\tablecaption</code>	• <code>\tablecaption{\langle Caption for a table \rangle}</code>

They can be used like the known `\caption` command:

```
\begin{figure}
  \includegraphics{...}
  \figurecaption{...}
\end{figure}
```

### 3.4 Example

Here is a short example of how to use the *inp-abstract* class.

```
\documentclass{inp-abstract}

\title{Title of the abstract}

\author[1]{\mainauthor{Aristotle}}
\author[2]{Diogenes}
\author[1]{Heraclides}
\affil[1]{Plato's Academy, Athens}
\affil[2]{Barrel, Sinope}

\resume{Lorem ipsum dolor sit amet, consectetur
adipiscing elit. Etiam lobortis facilisis sem.}

\begin{document}
  Lorem ipsum dolor sit amet, consectetur adipiscing
  elit. Etiam lobortis facilisis sem.

  \begin{figure}
    \fbox{\parbox[c][20mm][c]{50mm}{~}}
    \figurecaption{A caption to a figure.}
  \end{figure}

  Praesent imperdiet minec ante. Donec ullamcorper,
  felis non sodales commodo, lectus velit ultrices ...

  \begin{table}
    \begin{tabular}{ll}
      \hline
```

```

        abc & def \\
        \hline
    \end{tabular}
    \tablecaption{A caption to a table.}
\end{table}

Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit.

\begin{equation}
    F_G = G\frac{m_1m_2}{r^2}
\end{equation}
\end{document}

```

## 4 Closing words

This class was written for the Bioelectrics 2016<sup>3</sup> conference, held in Rostock, Germany and organised by the INP Greifswald.

If you find bugs, miss some functionality or just want to leave a comment on the class, feel free to write to [david.kiepsel@inp-greifswald.de](mailto:david.kiepsel@inp-greifswald.de).

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<sup>3</sup><http://www.bioelectrics2016.org/>