

The thielepres class

Lars Madsen*

May 31, 2007

Contents

Introduction	1
Special notice	1
Preamble of the document	2
Start of the document	2
The body of the document	3
Template	7

Introduction

The thielepres class is a small class, build on top of the memoir class, intended to be used for *web* publication of project descriptions for the homepage of the T.N. Thiele Centre.

As the focus is on web publication and not print, we will put more emphasis on the use of special internal hyperlinks than one normally would in a document intended for print. For this reason we also strongly encourage the use of pdf \LaTeX , since using \LaTeX + dvips + ps2pdf does not support as many hyperlink features as pdf \LaTeX .

Special notice

Please note that the class uses special fonts that may not be present on your home system or your laptop. For this reason the class has a build-in IMF

*Email: daleif@imf.au.dk

check. If this check fails the class will use the default font (Computer Modern), the Thiele logo will be replaced and a notice will appear in red, reminding you that the document has to be recompiled on the IMF \LaTeX system.

So the class can be used on your own system, but it will not have the final design.

Also, *do not* try to change the design or layout. The design has been chosen between the Thiele designer and the Thiele group.

Preamble of the document

You should simply start your document with

```
\documentclass{thielepres}
```

There is no need for any extra class options. The class automatically uses 11pt font size and a4paper.

Also the following packages are loaded automatically

- color
- babel with option `english`
- fontenc with option `T1`
- fourier if the document is compiled at IMF.
- graphicx
- amsmath and amssymb
- onlyamsmath
- calc
- url
- fix-cm
- multibib
- natbib
- nameref
- hyperref
- memhfixc (required by memoir when hyperref is used)
- breakurl is loaded if the document is *not* compiled using pdf \LaTeX .

The user can add whatever extra packages he or she needs, along with their own extra macros, such as

```
\newcommand\R{\mathbb{R}}
```

Start of the document

The class extends the features of `\maketitle`, such that the start of the document now goes like this:

```
\title{\<title>}  
\topic{\<project topic>}
```

```
\members{\list of members in this project}  
\date{\date if any}  
\maketitle  
  
\tableofcontents
```

The body of the document

Sectional titles

Use the standard `\section{<title>}` for creating section titles throughout your presentation. The class is configured to not use any section numbers. The use of the un-stared `\section` ensures that the `<title>` automatically goes into the table of contents where it will be converted into a hyperlink or easy navigation in the PDF version.

Since we do not use numbers for the sections it might be difficult to refer to a particular section. Instead you can use

```
\sectionref{<key>}
```

where `<key>` is a normal label placed after the `\section`. Then `\sectionref{<key>}` will print the actual *title* of the section. For example the title of the current section is »*Sectional titles*«. The title will be printed in italics.

Remark. Please note that if text resulting from `\sectionref{<key>}` is broken across a line break, then this title will only become a hyperlink if you are using pdf \LaTeX .¹

Further referencing features

The class supports three extra referencing tools (besides `\sectionref`).

```
\figureref{<key>}
```

Normally just writing `\ref{<key>}` will result in just the number being a hyperlink, which is a bit inappropriate. Instead `\figureref{<key>}` will write »Figure 2« (or what ever) and that entire text will become a hyperlink. Note that it is vital that the `<key>` is a label placed inside a figure environment.

Similarly, for equations we have

¹The reason is that dvips does not support broken hyperlinks.

```
\equationref{<key>}
```

which will write »Equation (2)« and the entire text becomes a hyperlink.

For writing a hyperlink with a user defined text pointing to a standard label, use

```
\linktolabel{<key>}{<link text>}
```

This creates a hyperlink pointing to *<key>* with the text *<link text>*.

Remark. Note that if you want a normal reference inside the *<link text>*, then use `\ref*{<key>}` or `\pageref*{<key>}`.

Graphics

The class autoloads the graphicx package, so you can use the normal `\includegraphics` macro.

Regarding the use of floats, please remember to use a construction similar to this:

```
\begin{figure} [htbp]
\centering
\includegraphics [<options>] {<graphics>}
\caption{<text>}
\label{<key>}
\end{figure}
```

Note the »[htbp]«. If you only use, say, »[h]« you risk to have floats that float too far away.

Mathematics

The design of the presentations dictate that all displayed mathematics should be in a larger font size. The class does this automatically for all of the standard amsmath environments like `align`, `gather`, `multline` but also including `\[...]` and `equation`.

For this reason the non-recommended math environments `$$...$$` or the `eqnarray` and `displaymath` have all been disabled and any use will cause an error.

Bibliographic material

The design uses so called author–year system for citations and we use the standard natbib package.

In some cases project members may want to present two different bibliographies: one for their own work and one for related work/approaches by other researchers who are not members of the project.

The class can handle this in two ways: by hand (tedious) and using BibT_EX. We will handle the BibT_EX case first.

BibT_EX

The class automatically loads the multibib package and preforms a little configuration for it. This means that you will be able to use

```
\cite{<key>}
```

for the normal citations, i.e. your own work. Furthermore you can use

```
\citeref{<key>}
```

to cite related material, i.e. publications on this project *not* written by Thiele members. The macro `\nociteref{<key>}` can be used to add something to the related bibliography without citing it in the text. Then at the location where you want the bibliographies you place

```
\thielebibfile{<bib files>}
\thielebibstyle{<bibstyle>}
\printthielemainbibliography[<title>]
\printthielerelatedbibliography[<title>]
```

The same BibT_EX files will be used for both bibliographies and they will both use the same BibT_EX style. The *<title>* part is for altering the title of the bibliography. The defaults are: »Our publications on this topic« and »Related publications«.

When you have cited a related article (via `\citeref`), a notice will be written to the file »rel.aux«. You will hen have to run BibT_EX on this file each time you cite some new related material, i.e. run

```
bibtex rel
```

in a terminal (that is a Command prompt or an Xterm). Then rerun L^AT_EX at least twice.

Of course for the main bibliography you should run BibT_EX on your document as usual, i.e. if your document is called »main.tex« then run

```
bibtex main
```

It may even better to run both right after each other:

```
bibtex main bibtex rel
```

then one or the other is not forgotten.

Bibliography creation by hand

For creating two bibliographies by hand the class offers two versions of the standard thebibliography environment.

```
\begin{thethielemainbib}[\langle title \rangle]{\langle leave empty \rangle}
\bibitem[\langle citation \rangle]{\langle bib key \rangle} \langle text \rangle
\bibitem[\langle citation \rangle]{\langle bib key \rangle} \langle text \rangle
\end{thethielemainbib}
```

for the main bibliography. And

```
\begin{thethielerelatedbib}[\langle title \rangle]{\langle leave empty \rangle}
\bibitem[\langle citation \rangle]{\langle bib key \rangle} \langle text \rangle
\bibitem[\langle citation \rangle]{\langle bib key \rangle} \langle text \rangle
\end{thethielerelatedbib}
```

for the related bibliography. The $\langle citation \rangle$ text has to have the following syntax:

```
\langle surnames \rangle(\langle year \rangle)
```

Example

```
Jensen and Kiderlen(2006)
```

But be aware that if the same name combination appears in the same year you will have to add trailing a, b,... by hand, both in the citation and in the bibliographic text. Example

```
\bibitem[Author(2007a)]{art1} Author, \emph{Title}, 2007a.
\bibitem[Author(2007b)]{art2} Author, \emph{Other title}, 2007b.
```

The correct spacing etc. for the citation is handled internally by the $\backslash citeX$ macros. The citations will automatically be converted into hyperlinks.

Template

The following template is the sample file that follows accompanies this class.

```
\documentclass{thielepres}
% add your extra preamble here
\begin{document}

\title{Title of presentation}
\topic{Project topic}
\members{list of members in this project}
\date{\today}
\maketitle

\tableofcontents

% for extremely long title use
% \section[short title]{long title}, then 'short title' will be added
% to the ToC.
\section{Description of problem}
\label{sec:description-problem}

We have this problem\dots

In \figureref{fig:1} % automatically adds 'Figure'
we see that \equationref{eq:1} say something and it is located in the
section entitled
\sectionref{sec:some-other-headline}.

Click \linktolabel{sec:some-other-headline}{here} to go to the next section.

\newpage % added for illustrative purposes, remove in real document

\section{Some other headline}
\label{sec:some-other-headline}

blah blah, see \cite{art1} or in related research \citerel{art3}.

\begin{figure}[htbp] % remember the [htbp] part
\centering
\rule{4cm}{4cm} % very boring figure ;-)
\caption{A \emph{very} interesting figure}
```

```

\label{fig:1}
\end{figure}

% a very boring equation to illustrate the equation refence system
\begin{align}
A &= \int_x^y B(t)\,dt \label{eq:1} \\
&= 0 \label{eq:2}
\end{align}

% handmade bibliography for your own/member publications
\begin{thethielemainbib} % [alternative heading]
\bibitem[Author1(2007a)]{art1}
Author1, \emph{Some title}, 2007a.

\bibitem[Author1(2007b)]{art2}
Author1, \emph{Some other title}, 2007b.
\end{thethielemainbib}

% write text in between if you like

% alternative bibliography for related research
\begin{thethielerrelatedbib} % [alternative headline]
\bibitem[Author2 and Author 3(2007)]{art3}
Author2 and Author3, \emph{Some other title}, 2007.
\end{thethielerrelatedbib}

% if you rather use BibTeX:
% \thielebibfile{mybib} % list of bibfiles used in both main and related
% \thielebibstyle{abbrvnat} % style used by both bibliographies
%
% \printthielemainbibliography % [alternative title]
%
% you may write some text in between
%
% \printthielerrelatedbibliography % [alternative title]
%
% remember that each time you cite a new related article you will have
% to run
%
% bibtex rel
%
% and rerun latex twice.

```

`\end{document}`