

HIT Beamer Presentation Theme

Using LATEX to prepare slides

LIU Qi-long (Kirov)

Created on May 22, 2022





This template is a secondary creation of SINTEF Presentation template from Federico Zenith

Following is a brief introduction written by Federico Zenith about how to use LATEX and beamer to prepare slides. All rights reserved by him

This template is released under Creative Commons CC BY 4.0 license



Table of Contents

1 Introduction

► Introduction

► Editing

► Summary



Beamer for SINTEF slides

1 Introduction

- We assume you can use LATEX; if you cannot, you can learn it here
- Beamer is one of the most popular and powerful document classes for presentations in L^AT_EX
- Beamer has also a detailed user manual
- Here we will present only the most basic features to get you up to speed



Beamer vs. PowerPoint

1 Introduction

Compared to PowerPoint, using LATEX is better because:

- It is not What-You-See-Is-What-You-Get, but What-You-Mean-Is-What-You-Get: you write the content, the computer does the typesetting
- Produces a pdf: no problems with fonts, formulas, program versions
- Easier to keep consistent style, fonts, highlighting, etc.
- Math typesetting in TEX is the best:

$$\mathrm{i}\,\hbar\frac{\partial}{\partial t}\Psi(\mathbf{r},t) = -\frac{\hbar^2}{2\,m}\nabla^2\Psi(\mathbf{r},t) + V(\mathbf{r})\Psi(\mathbf{r},t)$$



$\begin{array}{c} \textbf{Table of Contents} \\ ^{2 \ \text{Editing}} \end{array}$

- ▶ Introduction
- ▶ Editing
- ► Summary



Selecting the Class ² Editing

After the last update to the graphic profile, the sintef theme for Beamer has been updated into a full-fledged class. To start working with sintefbeamer, start a LATEX document with the preamble:

Minimum SINTEF Beamer Document

- 1 \documentclass{sintefbeamer}
- 2 \begin{document}
- 3 \begin{frame}{Hello, world!}
- 4 \end {frame}
- 5 \end{document}



To set a typical title page, you call some commands in the preamble:

```
The Commands for the Title Page
```

- 1 \title{Sample Title}
- 2 \subtitle{Sample subtitle}
- 3 \author{First Author, Second Author}
- 4 \date{Defaults to today's}

You can then write out the title page with \maketitle.

You can set a different background image than the default one with the \titlebackground command, set before \maketitle.

In the backgrounds folder, you can find a lot of standard backgrounds for SINTEF presentation title pages.



Writing a Simple Slide

It's really easy!

• A typical slide has bulleted lists



Writing a Simple Slide

It's really easy!

- A typical slide has bulleted lists
- These can be uncovered in sequence



Writing a Simple Slide

It's really easy!

- A typical slide has bulleted lists
- These can be uncovered in sequence

Code for a Page with an Itemised List

```
1 \begin{frame}
2 \frametitle{Writing a Simple Slide}
3 \framesubtitle{It's really easy!}
4 \begin{itemize}[<+->]
5 \item A typical slide has bulleted lists
6 \item These can be uncovered in sequence
7 \end{itemize}
8 \end{frame}
```



Adding images works like in normal IATEX:

Code for Adding Images

- 1 \usepackage{graphicx}
- 2 % ..
- 3 \includegraphics
- 4 [width=\textwidth]{images/default}





Splitting in Columns ² Editing

Splitting the page is easy and common; typically, one side has a picture and the other text:

This is the first column

And this the second

Column Code

```
1 \begin{columns}
2     \begin{column}{0.6\textwidth}
3         This is the first column
4     \end{column}
5     \begin{column}{0.3\textwidth}
6         And this the second
7     \end{column}
8         There could be more!
9 \end{columns}
```



- The paramount task of fonts is being readable
- There are good ones...
 - Use serif fonts only with high-definition projectors
 - Use sans-serif fonts otherwise (or if you simply prefer them)
- ... and not so good ones:
 - Never use monospace for normal text
 - Gothic, calligraphic or weird fonts should always be avoided



- To change the colour of the title dash, give one of the class options cyandash (default), greendash, magentadash, yellowdash, or nodash.
- To change between the light and dark themes, give the class options light (default) or dark. It is not possible to switch theme for one slide because of the design of Beamer—and it's probably a good thing.
- To insert a final slide, use \backmatter.
- The aspect ratio defaults to 16:9, but you can change it to 4:3 for old projectors by passing the class option aspectratio=43; any other values accepted by Beamer are also possible.



Table of Contents 3 Summary

- ► Introduction
- ► Editing
- **▶** Summary



- Enough for an introduction! You should know enough by now
- If you have corrections or suggestions, send them to me!



Q&A

Thank you for listening!
Your feedback will be highly appreciated!