College Beamer Presentation Themes

Using LaTeX to prepare slides

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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

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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 LaTeX
- 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

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:

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

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Selecting the Class

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 Beamer Document

```
\documentclass{beamer}
\begin{document}
    \begin{frame}{Hello, world!}
    \end {frame}
\end{document}
```

Title page

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

The Commands for the Title Page

```
\title{Sample Title}
\subtitle{Sample subtitle}
\author{First Author, Second Author}
\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

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Code for a Page with an Itemised List

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

Adding images

Adding images works like in normal LaTeX:

Code for Adding Images

```
\usepackage{graphicx}
% ...
\includegraphics
[width=\textwidth]{gallery/img.jpg}

```

Splitting in Columns

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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

```
\begin{columns}
        \begin{column}{0.6\textwidth}
                This is the first column
        \end{column}
        \begin{column}{0.3\textwidth}
                And this the second
        \end{column}
        % There could be more!
\end{columns}
```

Fonts

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- 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

Look

- 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.

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Good Luck!

3 Summary

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

Q&A

感谢您的聆听和反馈