SLEEK BEAMER THEME
Demonstration and short introduction to beamer

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DEMEC
FEUP

STRUCTURE

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2. Tutorial

3. Example slides

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INTRODUCTION

WHAT IS BEAMER?

The beamer classes for LATEX are used to create presentations that are to be shown with a beamer. The text typesetting system creates PDF files that can be shown by a large number of programmes.

The present theme was adapetd from HSRM theme by Benjamin Weiss and it makes the creation of slides (assuming basic knowledge of LATEX) child's play.

SYSTEM REQUIREMENTS

In order to successfully create presentations with this theme, the following requirements must be met by the system:

- LuaLaTeX must be used to typeset the slides.
- Besides some standard packages, the packages `beamer`, `pgf` and `xcolor` must be installed.
- The fonts 'Flama-Light', 'Flama-Book' and 'Flama-Medium' should be installed. Alternative: 'Arial'
  http://www.felicianotypefoundry.com/

TUTORIAL

BASIC STRUCTURE OF THE DOCUMENT

The basic structure is simple:

```latex
1  \documentclass[compress]{beamer}
2  % Theme
3  \usetheme{sleek}
4  % General presentation settings
5  \title{Presentation title}
6  \subtitle{Subtitle of the presentation}
7  \author{Your name}
8  \institute{Study area \\ {\Medium FEUP}}
9  \begin{document}
10 %Slides
11 \end{document}
```

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THEME OPTIONS

To customise the presentation, the following options can be selected.

Option	Effect
`noflama`	If you do not want the Flama font you can switch to the Arial font with this option.
`noserifmath`	Formulas are also set sans serif.
`nosectionpages`	The section introduction pages will be hidden.
`footline`	Footline with author, course and slide number.

PRIMARY COLOURS

All colours predefined are listed below and in the following slide. You may add more using the same code structure as in the `colors.tex` file.

maincolor	maincolor
sleekRed	sleekRed
sleekRedDark	sleekRedDark
sleekWarmGreyDark	sleekWarmGreyDark
sleekWarmGreyLight	sleekWarmGreyLight
sleekLightGrey	sleekLightGrey

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SECONDARY COLOURS

sleekSec1 | sleekSec1
sleekSec1Dark | sleekSec1Dark
sleekSec1Comp | sleekSec1Comp
sleekSec1CompDark | sleekSec1CompDark
sleekSec2 | sleekSec2
sleekSec2Dark | sleekSec2Dark
sleekSec2Comp | sleekSec2Comp
sleekSec2CompDark | sleekSec2CompDark
sleekSec3 | sleekSec3
sleekSec3Dark | sleekSec3Dark
sleekSec3Comp | sleekSec3Comp
sleekSec3CompDark | sleekSec3CompDark

SLIDE STRUCTURE

Structure in Beamer is the same as in LaTeX using `section`, `subsection`, etc. For slides the `frame` environment is defined.

The slide title can be passed directly to the `frame` environment or set within the environment using `\frametitle{slide title}`

```
1  \section{My Section}
2  \subsection{My Subsection}
3  \begin{frame}
4  \frametitle{slide title}
5  % slide content
6  \end{frame}
```

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TITLE PAGE AND TABLE OF CONTENTS

The title page is created with

```
1  \maketitle
```

And the table of contents with

```
1  \begin{frame}{outline}
2      \tableofcontents[hideallsubsections]
3  \end{frame}
```

The option `hideallsubsections` is useful for longer presentations to keep the table of contents compact.

ENUMERATIONS

Enumerations are possible with the `enumerate` and the `itemize` environment.

1. Item 1
   1.1 Nested item
2. Item 2
   - Point 1
   - Point 2
3. Item 3

ENUMERATIONS WITH TIMINGS

A list may be presented showing each bullet or item one by one. To achieve this result please see the source code for this frame. The standard display style is the one on the left, if you want to see the upcoming items just add the command `\setbeamercovered{transparent}` before the beginning of the document (right column).

- Visible from the 1st slide

- Visible from the 1st slide
- Visible from the 2nd slide
- Visible from the 3rd slide

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- Visible from the 1st slide
- Visible from the 2nd slide

- Visible from the 1st slide
- Visible from the 2nd slide
- Visible from the 3rd slide

Display content at a specific slide

There is also the option to show content only at a specific slide or set of slides, using the command `\only`. The `\onslide` command can also be used, but the behaviour is a little different.

ENUMERATIONS WITH TIMINGS

A list may be presented showing each bullet or item one by one. To achieve this result please see the source code for this frame. The standard display style is the one on the left, if you want to see the upcoming items just add the command `\setbeamercovered{transparent}` before the beginning of the document (right column).

- Visible from the 1st slide
- Visible from the 2nd slide
- Visible from the 3rd slide

- Visible from the 1st slide
- Visible from the 2nd slide
- Visible from the 3rd slide

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EMPHASIS

In the Beamer class, the function \alert is defined to highlight individual words. Example:

- **highlighted text**
- This phrase is an example of the **alert** command.

Additionally, \quoted and \doublequoted can be used, resulting in the following outputs:

'single quotation marks'

"Double quotation marks"

SIMPLE BLOCK WITH BULLETED AND ENUMERATED LIST

Block environments are defined in Beamer for structuring purposes.

Block with bulleted an enumerated list

- Point 1
    1. Item 1

```
1  \begin{block}{Block with bulleted an enumerated list}
2      \begin{itemize}
3          \item Point 1
4          \begin{enumerate}
5              \item Item 1
6          \end{enumerate}
7      \end{itemize}
8  \end{block}
```

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ALERT BLOCK

Alert Block

An Alert Block is coloured with the first primary colour.

```
1  \begin{alertblock}{Alert Block}
2      An Alert Block is coloured with the first primary
          colour.
3  \end{alertblock}
```

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EXAMPLE BLOCK

Example Block

An Example Block is coloured with the first secondary colour.

```
1  \begin{exampleblock}{Example Block}
2      An Example Block is coloured with the first secondary
         colour.
3  \end{exampleblock}
```

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BLOCK WITH OTHER COLOUR

Block with other colour

Another secondary colour is used in this block.

```
1  \begingroup
2  \setbeamercolor{block title}{bg=sleekSec2Dark}
3  \setbeamercolor{block body}{fg=white,bg=sleekSec2}
4  \begin{block}{Block with other colour}
5      Another secondary colour is used in this block.
6  \end{block}
7  \endgroup
```

EXAMPLE SLIDES

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OTHER EXAMPLES

Below are more example slides attached without additional explanation.

Just have a look at the source code to see how the slides were created.

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PHOTO WITH COPYRIGHT

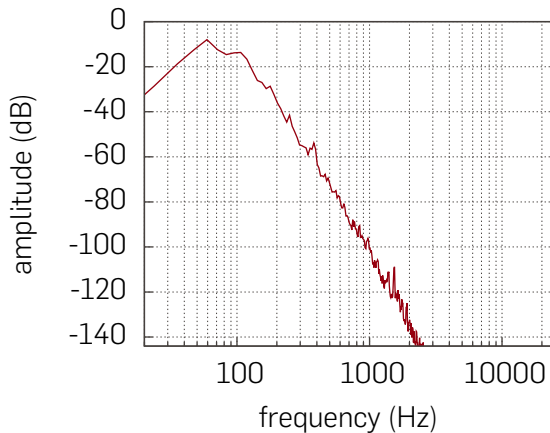Copyright by Netlemming, CC BY-NC 3.0 License

PLOT WITH CAPTION

Figure: LFE channel frequency spectrum

TABLE

Table: Selection of window function and their properties

Window	First side lobe	3 dB bandwidth	Roll-off
Rectangular	13.2 dB	0.886 Hz/bin	6 dB/oct
Triangular	26.4 dB	1.276 Hz/bin	12 dB/oct
Hann	31.0 dB	1.442 Hz/bin	18 dB/oct
Hamming	41.0 dB	1.300 Hz/bin	6 dB/oct

FORMULAS

Fourier Integral

$$F(\mathrm{j}\omega) = \int\limits_{-\infty}^{\infty} f(t) \cdot \mathrm{e}^{-\mathrm{j}\omega t} dt$$

Factorial

$$n! = 1 \cdot 2 \cdot 3 \cdot \ldots \cdot n = \prod_{k=1}^{n} k$$

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MINDMAP WITH TIKZ
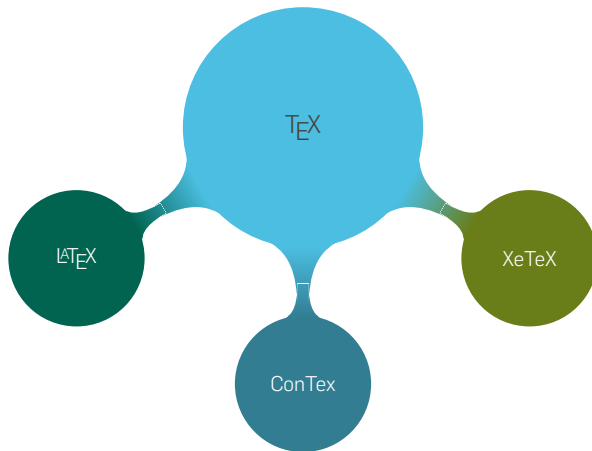
FOOTNOTES

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SLIDE WITH ASSOCIATED NOTES SLIDE

This slide is for the audience.

The following programmes are suitable for its presentation:

- Splitshow (Mac OS X)
  urlhttps://code.google.com/p/splitshow/
- pdf-presenter (Windows)
  urlhttps://code.google.com/p/pdf-presenter/

Sleek Beamer Theme
└─Example slides
  └─Notes
    └─slide with associated notes slide

Use this slide for your notes on the presentation.
The following programmes are suitable for your presentation:

- Splitshow (Mac OS X)
  https://code.google.com/p/splitshow/

- pdf-presenter (Windows)
  https://code.google.com/p/pdf-presenter/

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TWO COLUMNS

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- another entry

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COLUMN BREAK

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- one entry
- another entry

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REFERENCES

📕 Alan V. Oppenheim
"Discrete-Time Signal Processing"
Prentice Hall Press, 2009

📄 European Broadcasting Union
"Specification of the Broadcast Wave Format (BWF)"
2011

OUTLOOK

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TO DO

- An option to a more complete footline needs to be added.

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QUESTIONS, COMMENTS, CONTACT

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Please feel free to contact me if you have any questions or comments.

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