`Images/logo-eps-converted-to.pdf`

SLEEK BEAMER THEME

Demonstration and short introduction to beamer
Adapted from HSRM theme by Benjamin Weiss

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DEMEC
FEUP

STRUCTURE

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

The basic structure is simple:

```
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\University {\Medium RheinMain}}
9  \begin{document}
10 %Slides
11 \end{document}
```

THEME OPTIONS

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

Option	Effect
`noflama`	If you do not have 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.

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

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}
```

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
2. item 2
   - point 1
   - point 2
3. point 3

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

- **highlighted text**

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

'single quotation marks'

"Double quotation marks"

SIMPLE BLOCK WITH ENUMERATION

Block environments are defined in Beamer for structuring purposes.

Block with an enumeration

- point 1
- point 2

```latex
1  \begin{block}{block with a bullet}
2      \begin{itemize}
3          \item point 1
4          \item point 2
5      \end{itemize}
6  \end{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}
```

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}
```

Block with other colour

Another secondary colour is used in this block.

```
1  \begingroup
2  \setbeamercolor{block title}{bg=sleekSec2Dark}
3  \setbeamercolor{block body}{bg=sleekSec2}
4  \begin{block}{block with other colour}
5      In this block, ...
6  \end{block}
7  \endgroup
```

EXAMPLE SLIDES

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.
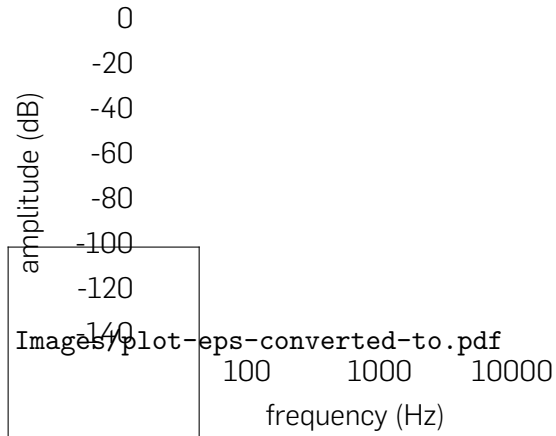
Figure: LFE channel frequency spectrum

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

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

Factorial

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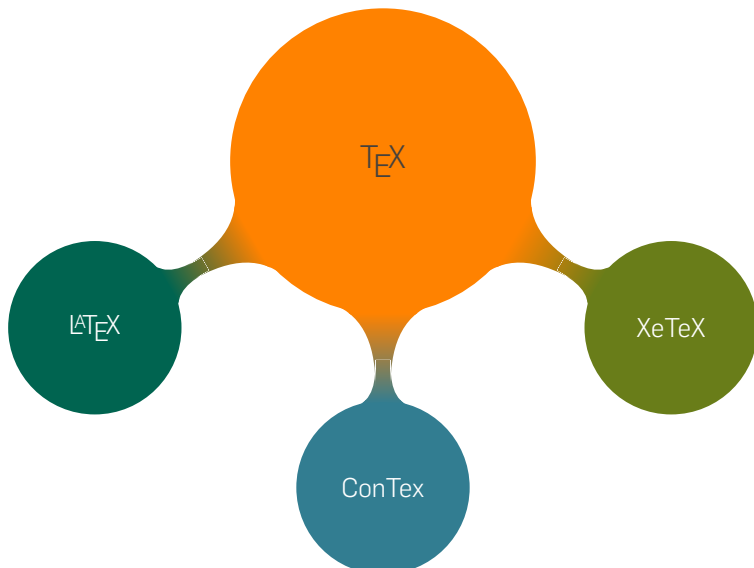
FOOTNOTES

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem [1] ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

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[1]Lorem ipsum dolor sit amet

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/

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/

TWO COLUMNS

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

- one entry
- another entry

COLUMN BREAK

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

- one entry
- another entry

REFERENCES

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

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

OUTLOOK

TO DO

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

QUESTIONS, COMMENTS, CONTACT

The SLEEK theme is licensed under the 'GNU Public License'. So it may be redistributed and modified as long as the license type is kept.

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

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