U.PORTO

**FEUP** FACULDADE DE ENGENHARIA
UNIVERSIDADE DO PORTO

# SLEEK BEAMER THEME
Demonstration and short introduction to beamer
Adapted from HSRM theme by Benjamin Weiss

Last Update: 21st September 2022

Pedro Ferreira

DEMEC
**FEUP**

## STRUCTURE

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2. Tutorial

3. Example slides

4. Outlook

# 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:

```
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. |

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## 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 |

## SECONDARY COLOURS

sleekSec1

sleekSec1Dark

sleekSec1Comp

sleekSec1CompDark

sleekSec2

sleekSec2Dark

sleekSec2Comp

sleekSec2CompDark

sleekSec3

sleekSec3Dark

sleekSec3Comp

sleekSec3CompDark

| sleekSec1 |
| sleekSec1Dark |
| sleekSec1Comp |
| sleekSec1CompDark |
| sleekSec2 |
| sleekSec2Dark |
| sleekSec2Comp |
| sleekSec2CompDark |
| sleekSec3 |
| sleekSec3Dark |
| sleekSec3Comp |
| 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
2. item 2
   - point 1
   - point 2
3. point 3

EMPHASIS

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

```
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

### 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}
```

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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}{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.

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## PHOTO WITH COPYRIGHT



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## PLOT WITH CAPTION
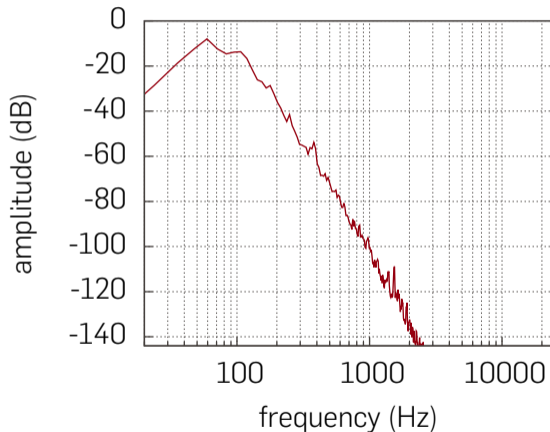


Figure: LFE channel frequency spectrum

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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
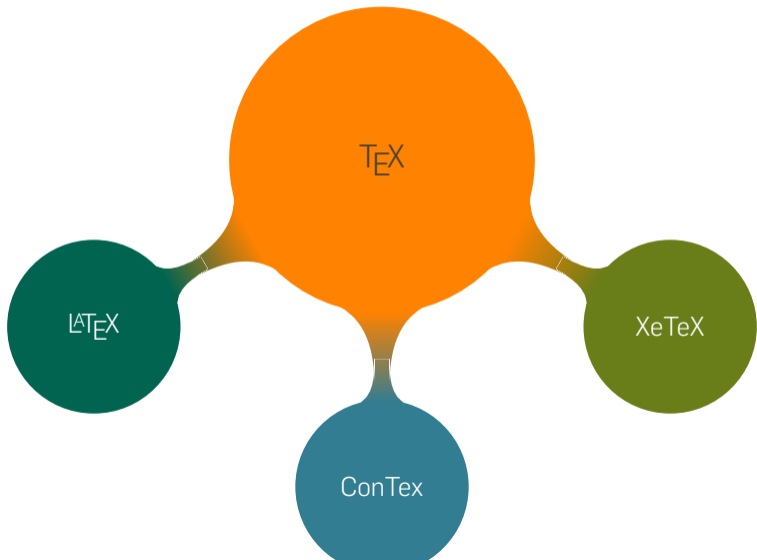
### Fourier Integral

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

### Factorial

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

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# MINDMAP WITH TIKZ

## FOOTNOTES

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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

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- 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.

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## 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.

- up201806093@up.pt