# A first RPTU LATEX Presentation A more detailed example

with the new RPTU Kaiserslautern-Landau Corporate Design

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# Agenda

- 1. Theme Options
- 2. Elements of a Frame
  - > Blocks
  - > Footnotes
  - > Frame Styles
  - > Lists
- 3. Math
- 4. Images and Figures

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**RPTU** 



#### Available options I - Colors and RPTU Hausschrift (Red Hat Text) \usetheme[options]{rptu}

Option	Description
dunkelblau hellblau rot orange dunkelgruen hellgruen blaugrau gruengrau violett pink	Set color scheme of presentation (dunkelblau is default) Each line defines a colorscheme, you specify the main color and the secondary color is set automatically
redhattext=true false	Use/ <b>Do not use</b> the Red Hat Text Font needs specific compilers ⇒ read remarks (Slide 5)

Defaults are the descriptions written in **bold**.

# **Using Red Hat Text**

- > Make sure that the static versions of the font are installed on your computer
- > We use the following .ttf files
  - > RedHatText-Regular as normal text
  - > RedHatText-Italic as italic \textit
  - > RedHatText-SemiBold as **bold** \textbf
  - > RedHatText-SemiBoldItalic for **bold and italic**
  - > RedHatText-Bold for title and the sectionpage, can be accessed with \fontseries{k}\selectfont
- We use the package fontspec for setting this font  $\Rightarrow$  you need to compile with X3LATEX (XeLaTeX) or LuaLATEX (LuaLaTeX) if you want to use Red Hat Text
- > If you use X\_ATEX or LualATEX with the option redhattext=false then Arial is set as main font family with Arial Black as substitute for **RedHatText-Bold** (you need to install Arial/Arial Black manually under Ubuntu in that case)
- > With pdfLaTeX the main font family is Computer Modern (LATEX default)

# Available options II - Logos \usetheme[options]{rptu}

Option	Description
ownlogo=true false	Use/ <b>Do not use</b> a user specified logo
	(instead of default RPTU logo)
sponsorlogo=true false	Use/ <b>Do not use</b> a user specified sponsor logo
	(placed in upper right corner)

Defaults are the descriptions written in **bold**.

In both cases you need to specify the exact image with dimensions by filling

- > \renewcommand\sponsorlogo{} \Rightarrow image B on the title page
  with e.g. \includegraphics[width=3cm]{your\_file.png}

## Available options III - Footline

\usetheme[options]{rptu}

Option	Description
institute=true false	Show/ <b>Hide</b> short institute in footline
displayinstitute	Show short institute in footline
hideinstitute	Hide short institute in footline
frametotal=true false	Show/ <b>Hide</b> total number of slides in footline
displayframetotal	Show total number of slide in footline
hideframetotal	Hide total number of slide in footline

Defaults are the descriptions written in **bold**.

This version uses the option displayframetotal but the default regarding the institute in the footline.

# Available options IV - Navigation

\usetheme[options]{rptu}

Option	Description
navigation=true false	Show/ <b>Hide</b> navigation in headline
displaynavigation	Show navigation in headline
hidenavigation	Hide navigation in headline
compress	equivalent to beamer's compress

Defaults are the descriptions written in **bold**. If you do not specify any navigation option, no navigation bar with mini frames will be shown.

This presentation uses the defaults, i.e. no navigation bar.

#### **Options** Some Remarks

- > Use navigation=true in combination with the option compress to obtain a single line for the navigation symbols.
- > If institute=true the \institute is used to set the name of department/institute/affiliation both in the footline and on the title page \institute[name in footline]{name on title page}
- > Use \documentclass[aspectratio=169] {beamer} for getting a 16:9 aspect ratio instead of 4:3



# Elements of a Frame Blocks

## **Blocks**

#### Basic Block

block: Content is typeset like this

#### Alert Block

alertblock (always in rot/orange): Content is typeset like this

### Example Block

exampleblock (always in dunkelgruen/hellgruen): Content is typeset like this

## Definition (Probability Space)

A definition goes here.

## Theorem (Bayes' Theorem)

We might want to state theorems.

## Example

Or give examples.

#### Proof.

And a proof.

## A RPTU Design Box

These boxes are created with the tcolorbox package and are defined within beamerthemeRPTU.sty.

```
\begin{rptu-twocolors}

text
\end{rptu-twocolors}

\begin{rptu-onecolor}

text
\end{rptu-onecolor}
```



# Elements of a Frame Footnotes

## **Footnotes**

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. Sed diam voluptua.<sup>1</sup> 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.

<sup>&</sup>lt;sup>1</sup> here goes a footnote

#### **Footnotes** What happens with mutiple footnotes?

Sed diam voluptua. At vero eos et accusam et justo duo dolores<sup>2</sup> et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Sed diam voluptua.<sup>3</sup> 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.4

<sup>&</sup>lt;sup>2</sup> some footnote

<sup>&</sup>lt;sup>3</sup>here goes a footnote

<sup>&</sup>lt;sup>4</sup>even a third footnote



# **Elements of a Frame Frame Styles**

## A slide of style minimal

```
You can create a slide like this via 
\begin{frame} [minimal] {A slide of style minimal} ... 
\end{frame} 
Here, only frame number and RPTU logo are shown in the footline.
```

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# A slide of style minimal and highlight1

```
\begin{frame}[minimal]{A slide of style minimal, highlight1}
...
\end{frame}
```

Here, only frame number and RPTU logo are shown in the footline. **Highlight1** sets the background color to the main color.

- > A
  - > A
  - > B
- > B

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#### A slide of style highlight2

```
\begin{frame}[highlight2]{A slide of style highlight2}
...
\end{frame}
Highlight2 sets the background color to the secondary color.
```

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## A slide of style plain

```
\begin{frame}[plain]{A slide of plain}
...
\end{frame}
```

An example for a **plain** slide with title, thus no footline, no headline, no navigation (in case that you use the navigation option)

# If you want a monochrome slide

```
\begin{frame}[minimal, black]{If you want a monochrome slide}
...
\end{frame}
This one uses minimal and black
```

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#### Back to a white slide

Style changes are only changed back to default at the beginning of each standard slide. \rptusectionpage does not count as a slide. You should use a non-colored slide before using a sectionpage with a subsection title (as e.g. the next slide) to correctly change the colors. Using minimal or plain is fine.



# Elements of a Frame Lists

#### **Itemize and Enumerate Environments**

#### Some text before the itemize

- > one
  - > item one one
  - > item one two
    - > item one one
    - > item one two
- > two

Some text after the itemize

#### Some text before the enumerate

- 1. one
- 2. two
  - 2.1. enumerate with subitem
  - 2.2. second
- 3. and even mixed
  - > item one one
  - > item one two

Some text after the enumerate

# 3 Math

# Sample of Math Typesetting

By default, the beamer template changes the math font to the sans serif font.

$$\sum_{n=1}^{k} \frac{1}{n} \succ \int_{1}^{k+1} \frac{1}{x} dx = \ln(k+1) \qquad \sum_{n=0}^{\infty} \frac{(-1)^{n}}{2n+1} = 1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \dots = \frac{\pi}{4}$$

$$\int_{a}^{b} f(x) dx = F(b) - F(a) \qquad \qquad f'(a) = \lim_{h \to 0} \frac{f(a+h) - f(a)}{h}$$

$$\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix} \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix} = \begin{bmatrix} 0 & 1 \\ 0 & 3 \end{bmatrix} \qquad \qquad r = |z| = \sqrt{x^{2} + y^{2}}$$

If you want to use a different sans serif or a serif font, you can use

\usepackage{unicode-math} \setmathfont{Latin Modern Math}

in the preamble to specify Latin Modern Math (as a serif font) or any other available font as math font.



# Images and Figures with \subsection\* it is possible to add

some text here which does not count for the table of contents

# **Include Images** on black background



Figure: Image A

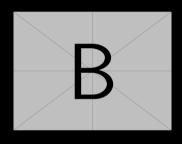


Figure: Image B

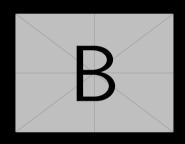


Figure: Image C

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# **Include Images** on white background

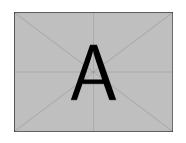


Figure: Image A

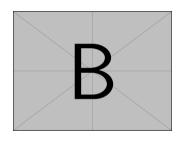


Figure: Image B

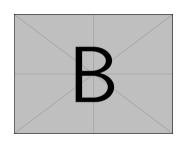


Figure: Image C

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# Thank you

Maybe your name

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