

TU/e Slides using Beamer

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Outline

PDF Presentations using \LaTeX

Using the TU/e Beamer Theme

TU/e Theme Options

Beamer Features

- Animations

- Piecewise Enumeration

- Inserting Multimedia

- Notes

- Handouts

- Inserting a Logo

- Different Backgrounds

Conclusion

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PDF Presentations using \LaTeX

Several packages exist to create Powerpoint-like presentations in PDF using (PDF) \LaTeX . Until now the only possibility to create slides in the TU/e style was using TU/ePDFScreen, based on the standard package `pdfscreen`. This package has several disadvantages, e.g. many warning messages, no floats allowed, slideshows can only be created using PDF \LaTeX , a postprocessor is needed to show slides in several steps, no animations possible.

In the mean time another PDF presentation package had been written that became some kind of standard: **beamer**. The beamer package has a huge amount of possibilities, at least too many to mention here. Now a TU/e theme for beamer has been created so \LaTeX users can create TU/e style presentations and still use the full range of features included in **beamer**.

Using the TU/e Beamer Theme

The TU/e Beamer theme is included for the first time on the MiKTeX 2.5 CD-ROM, but it can be downloaded from <http://www.win.tue.nl/latex>. Usage is very straightforward:

```
\usepackage{beamer}  
\usetheme{tue}
```

All you have to do now is divide your presentation into slides. A slide is called “frame” in the **beamer** package, but “slide” is also recognised.

```
\begin{frame}  
\frametitle{Title}  
  
Frame contents.  
  
\end{frame}
```


TU/e Theme Options

Several options have been defined for the `tue` beamer theme. All are `key=value` combinations. Except for the department, all options are booleans, which means that they can be `true` or `false`.

`blackheadings` specifies whether headers should be black or TU/e blue.

`sftext` specifies whether a sans-serif font should be used for regular text.

`sfheadings` specifies whether a sans-serif font should be used for frame titles.

`showpagenr` specifies whether a page number should be displayed on each frame.

`whitebg` when set to `true`, a white background will be used instead of a blue/grey one.

TU/e Theme Options

department sets the department name that will be printed in the footer of each slide. Valid values are: `ele`, `win`, `bmt`, `bwk`, `id`, `chem`, `tm`, `phys`, `wtb`.
If you want the English department name, simply add `uk` to the value.

TU/e Theme Options

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If you want the English department name, simply add `uk` to the value.

Example:

```
\usepackage{beamer}  
\setheme[department=winuk,sftext=true,  
showpagenr=false]{tue}
```

TU/e Theme Options: Multiple Slides per Page

Another option for the `tue` beamer theme that can be set, is the number of slides that will be printed on one page. This option is very useful for printing handouts (which will be discussed later). Valid values are 1, 2, 3, 4 and 6.

Example:

```
\usetheme[department=winuk,slidesperpage=2]{tue}
```

Beamer Features

Since TU/e Beamer is only a theme written for the `beamer` package, you can use all of `beamer`'s features. Open the beamer user guide for more information. It is located in

`C:\MiKTeX\texmf\doc\latex\beamer\doc\beameruserguide.pdf`

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- ▶ reveal slides and animations in multiple steps

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Beamer Features: piecewise enumeration uncovering

```
\begin{enumerate} [<+>]  
...  
\end{enumerate}
```

1. first item

Beamer Features: piecewise enumeration uncovering

```
\begin{enumerate} [<+>]  
...  
\end{enumerate}
```

1. first item
2. second item

Beamer Features: piecewise enumeration uncovering

```
\begin{enumerate} [<+>]  
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3. third item

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With transparency (`\setbeamercovered{transparent=30}`)

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```

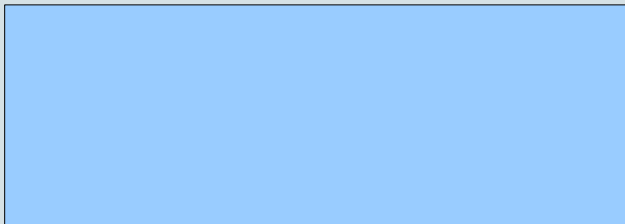
1. first item
2. second item
3. third item

With transparency (`\setbeamercovered{transparent=30}`)

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2. second item
3. third item

Beamer Features: including images in several steps

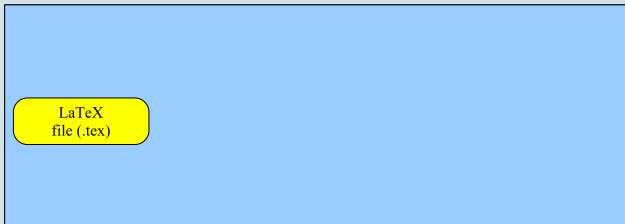
This slide gives an example of how to use the beamer feature to show several images one by one by placing them on top of each other.



```
\includegraphics<1->[width=7cm]{figure1} %  
\llap{\includegraphics<2->[width=7cm]{figure2}} %
```

Beamer Features: including images in several steps

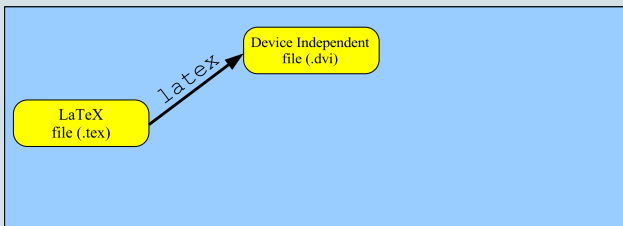
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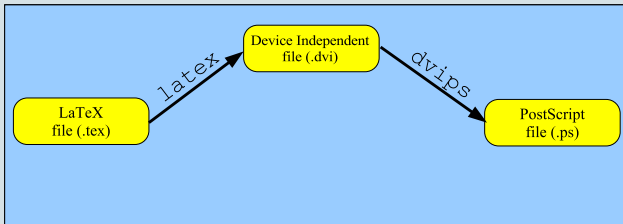
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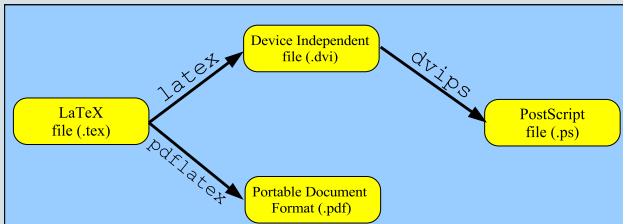
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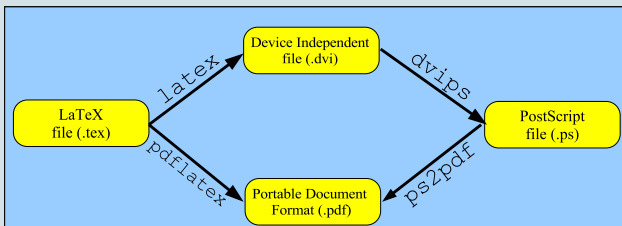
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```
\includegraphics<1->[width=7cm]{figure1} %  
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Beamer Features: an equation in several steps

Use the `\uncover` command in equation arrays:

$$E(\bar{y}) =$$

Beamer Features: an equation in several steps

Use the `\uncover` command in equation arrays:

$$E(\bar{y}) = E\left(\frac{\sum_{i=1}^n y_i}{n}\right)$$

Beamer Features: an equation in several steps

Use the `\uncover` command in equation arrays:

$$E(\bar{y}) = E\left(\frac{\sum_{i=1}^n y_i}{n}\right) = \frac{\sum_{i=1}^n E(y_i)}{n}$$

Beamer Features: an equation in several steps

Use the `\uncover` command in equation arrays:

$$\begin{aligned} E(\bar{y}) &= E\left(\frac{\sum_{i=1}^n y_i}{n}\right) = \frac{\sum_{i=1}^n E(y_i)}{n} \\ &= \frac{\sum_{i=1}^n E(\mu + \varepsilon_i)}{n} \end{aligned}$$

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Beamer Features: Inserting Multimedia

```
\usepackage{multimedia}
```

```
...
```

```
\movie[width=3cm,height=2cm,poster]{}{neutro.avi}
```

Sounds can also be embedded with the `\movie` command.

Beamer Features: Notes

It is possible to add notes in your slides using the `\note` command. Then specify the beamer option “show notes on second screen”.

```
\setbeameroption{show notes on second screen}  
...  
\note{Some notes for the current slide}
```

Beamer Features: Handouts

Handouts can be created using the beamer `handout` option:

```
\documentclass[t,handout]{beamer}
```

(the `t` option stands for vertically aligned “top” frames).

The `handout` option will remove all piecewise appearing material and only show the final versions. It will also execute the options `whitebg=true`, `blackheadings=true`, `slidesperpage=2`

It is possible to override this manually.

Beamer Features: Inserting a Logo

A logo can be inserted in the master slide template:

```
\logo{\includegraphics [width=3cm] {philipslogo}}
```

The logo will be placed in the title bar, 0.5 cm from the right margin. You can use the `\hspace` command to move the logo horizontally.



Beamer Features: A Different Background

It is possible to use a different background template, e.g. an empty Powerpoint file that is converted to PNG, JPG, EPS or PDF.

```
\usebackgroundtemplate {  
  \includegraphics [width=\paperwidth,  
                    height=\paperheight] {LaQuSo}  
}
```

Conclusion

- ▶ TU/e Beamer is a theme for the standard **beamer** package to create TU/e style presentations.
- ▶ It can be used with \LaTeX and PDF \LaTeX
- ▶ Support for piecewise revealing of slides
- ▶ Limited support for animations
- ▶ Notes can be displayed on a second screen
- ▶ Easy creation of handouts, supports multiple slides on one page

Questions or requests about TU/e Beamer?

⇒ Send an email to marko@win.tue.nl