

Beamer Presentations

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1 Using Beamer

2 Overlays

3 Themes

Why?

- Most of the usual T_EX stuff works . . .
- Including equations: $f(x) = \int_0^x g(t)dt$
- You can use source from paper to make presentation
- Result is PDF - does not depend on slide software
- More powerful than other options - Prosper, etc.

Beamer

- Beamer has its own documentclass:

```
\documentclass[pdf]{beamer}
```

- Other options include

- t, b, c (default)

- 10pt, 11pt (default), 12pt

- draft

- handout

- ignorenonframetext

Sections

- Sections are tracked in headers.
- `\section` takes an optional short title
- E.g. `\section[Short]{Short Titles Take Less Space}`

Frames

- Each slide is a *frame*
- `\begin{frame}{title}`
- You could use `\frametitle` inside the environment
- Inside frames you can put anything

Fragile

Some environments are fragile in frames. For that, use the optional argument `[fragile]`.

```
\begin{frame}[fragile]
```

```
\frametitle{Fragile}
```

Some environments are fragile in frames. For that, use the optional argument `\texttt{[fragile]}`.

```
\begin{verbatim}
```

```
\begin{frame}[fragile]
```

```
\frametitle{Fragile}
```

Some environments are fragile in frames. For that, use the optional argument `\texttt{[fragile]}`.

Pictures

- `\includegraphics` works as usual
- Be sure to use JPEG images



Basic Principles

- Beamer makes presentations by making many pages for a document.
- One frame might comprise several pages of the PDF
- Each page is identical, but for certain details
- The details are described by *overlays*

Overlays

It is nice to have text appear incrementally on a slide. Beamer uses overlays for this. The simplest overlay is simply to insert a `\pause` command between lines. The pause command tells Beamer to make a new page for what follows. This can be done basically anywhere.

Default Overlays

It is possible to set Beamer so that each item of all list environments gets an overlay automatically.

```
\beamerdefaultoverlayspecification{<+>}
```

Be sure to use the “handout” option when posting your presentation – the default overlay specification makes the PDF file much larger.

Overlays

- A more sophisticated overlay uses $\langle n - m \rangle$ notation
- The syntax is to insert e.g. $\langle 2- \rangle$ to indicate that text should appear from image 2 of current slide onward.
- Using $\langle 3 \rangle$ indicates that text appears only on page 3
- Using $\langle 3 - 5 \rangle$ indicates that text appears on page 3 to 5
- When items vanish, they leave a space
- You can use commas instead of dashes: $\langle 3, 4, 5 \rangle$

Fancy Overlay Commands

- Using `\onslide{}` we can make things appear or disappear
- The `\only{}` command makes argument text leave no space except when specified
- Beamer loads the color package automatically, but alters it
- *Several* commands have been modified to use $\langle n - m \rangle$ notation
- In particular, font, style and color commands take $\langle n \rangle$ to describe **when** when they should be used.
- One could also use `\only` to specify when other commands are valid

Document Themes

- There are many theme options for Beamer.
- In particular, there are layout themes
- These are packages: use them as
`\usepackage{beamerthemeGoettingen}`

For example: AnnArbor, JuanLesPins, Berkeley PaloAlto, Pittsburgh, Rochester Copenhagen, Darmstadt, Dresden

Color Themes

Color themes include:

beaver, beetle, crane, dolphin crane, dove, seahorse, whale

Use them as e.g. `\usepackage{beamercolorthemecougar}`

Font Themes

Font themes include:

serif, structurebold, structureitalicserif, structuresmallcapserif

To use them, type in the preamble e.g.

```
\usefonttheme{serif}
```


The Doors

```
#include <stdlib.h>
int main(){
    system("echo Hello world!");
    exit(0)
}
```