

Introduction to L^AT_EX

Part 2: Not Just Papers: Presentations & More

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1 Presentations with beamer



Next in Line...

1 Presentations with beamer



Presentations with beamer

- Beamer package for creating presentations (such as this one!) in $\text{\LaTeX}$
- It provides the beamer document class
- Use the frame environment to create slides

```
\documentclass{beamer}

\title{Welcome to Beamer}
\author{You}
\institute{Where You're From}
\date{Date of Presentation}

\begin{document}

\begin{frame}
  \titlepage % beamer's \maketitle
\end{frame}

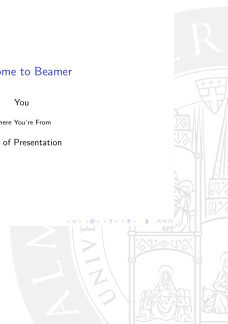
\end{document}
```

Welcome to Beamer

You

Where You're From

Date of Presentation



Presentations with beamer: following along

- As we go through the following slides, try out the examples by typing them into the example document on Overleaf

► [Click here to download a the document in Overleaf](#)



Presentations with beamer: Frames

- Use `\frametitle` to give the frame a title
- Then add content to the frame
- The source for this frame looks like:

```
\begin{frame}  
  \frametitle{Presentations with beamer: Frames}  
  \begin{itemize}  
    \item Use \texttt{\frametitle} to give the frame a title  
    \item Then add content to the frame.  
    \item The source for this frame looks like ...  
  \end{itemize}  
\end{frame}
```

Presentations with beamer: Sections

- You can use `\section` to group your frames, and beamer will use them to create an automatic outline
- To generate an outline, use the `\tableofcontents` command
- The `currentsection` option highlights the current section.

```
\tableofcontents[currentsection]
```

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Presentations with
beamer



Presentations with beamer: Multiple Columns

- Use the `columns` and `column` environments to break the slide into columns
- The argument for each column determines its width
- See also the `multicol` package, which automatically breaks your content into columns

```

\begin{columns}
\begin{column}{0.4\textwidth}
  \begin{itemize}
    \item Use the columns ...
    \item The argument ...
    \item See also the ...
  \end{itemize}
\end{column} \begin{column}{0.6\textwidth}
  % second column
\end{column}
\end{columns}

```

Presentations with beamer: Multiple Columns

- Use `\emph` or `\alert` to highlight

I should `\emph{emphasise}` that
this is an `\alert{important}` point.

I should *emphasise* that this
is an **important** point.

- Or specify bold face or italics:

Text in `\textbf{bold face}`.
Text in `\textit{italics}`.

Text in **bold face**. Text in
italics.

- Or specify a color (American spelling):

It `\textcolor{red}{stops}`
and `\textcolor{green}{starts}`.

It **stops** and **starts**.

- See <http://www.math.umbc.edu/~rouben/beamer/quickstart-Z-H-25.html> for more colors & custom colors

Presentations with beamer: Figures

- Use `\includegraphics` from the `graphicx` package
- The figure environment centers by default, in beamer

```
\begin{figure}  
  \includegraphics[  
    width=0.5\textwidth]{img/sample.jpeg}  
\end{figure}
```



Presentations with beamer: Tables

- Use `\includegraphics` from the `graphicx` package
- Use the `tabular` environment from the `tabularx` package
- Argument specifies column alignment — left, right, right
- It also specifies vertical lines; use `\hline` for horizontal lines
- Use an ampersand `&` to separate columns and a double backslash `\\` to start a new row.

```
\begin{tabular}{|l|r|r|} \hline
Item      & Qty    & Unit $ \\ \hline
Widget    & 1      & 199.99 \\
Gadget    & 2      & 399.99 \\
Cable     & 3      & 19.99 \\ \hline
\end{tabular}
```

Item	Qty	Unit \$
Widget	1	199.99
Gadget	2	399.99
Cable	3	19.99

Presentations with beamer: Blocks

- A block environment makes a titled box.
- How exactly they look depends on the theme...

```
\begin{block}{Interesting Fact}  
This is important.  
\end{block}
```

Interesting Fact

This is important.

```
\begin{alertblock}{Cautionary Tale}  
This is really important!  
\end{alertblock}
```

Cautionary Tale

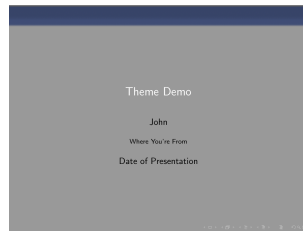
This is really important!

Presentations with beamer: Themes

- Customise the look of your presentation using themes
- See https://deic-web.uab.cat/~iblanes/beamer_gallery/index.html for a large collection of themes

```
\documentclass{beamer}
% or Warsaw, Bergen, Madrid, ...
\usetheme{Darmstadt}
% or albatross, beaver, crane, ...
\usecolortheme{beetle}

\title{Theme Demo}
\author{John}
\institute{Where You're From}
\date{Date of Presentation}
\begin{document}
\begin{frame}
\titlepage % beamer's \maketitle
\end{frame}
\end{document}
```



Presentations with beamer: Animation

- A frame can generate multiple slides
- Use the `\pause` command to show only part of a slide
- There many more clever ways of making animations in beamer; see also the `\only`, `\alt`, and `\uncover` commands

```
\begin{itemize}  
  \item Can you feel the  
    \pause \item anticipation?  
\end{itemize}
```

- Can you feel the



Presentations with beamer: Animation

- A frame can generate multiple slides
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```
\begin{itemize}  
  \item Can you feel the  
  \pause \item anticipation?  
\end{itemize}
```

- Can you feel the
- anticipation?



Presentations with beamer: Exercise

Recreate Peter Norvig's excellent "Gettysburg Powerpoint Presentation" in beamer¹

- 1 Download this image to your computer and upload it to Overleaf via the files menu
- 2 Create a presentation to make it look like the example one

▶ Click here to download the example image

▶ Click here to download the beamer presentation example

¹<http://norvig.com/Gettysburg>



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