

1 Creating a slide show

If you are writing papers or other technical documents in \LaTeX you will probably need to give a presentation at some point. The decision to use a \LaTeX slide-making environment is often based on the same considerations: typesetting maths is straightforward, creating precisely your own customisations is possible.

There are several slide-making document classes available, including the original class **slides** and the more powerful **Prosper**. One of the most popular and powerful classes is **beamer**. Early distributions of \LaTeX did not always include Beamer, but up-to-date distributions do.

Using Beamer it is possible to create complex and sophisticated slideshows which include equations, pictures and graphics, bibliographies, sound and animations. Effects such as pauses and transitions are simple to create; familiar \LaTeX commands work.

▷ Exercise 1 Creating a slide show

- i. Creating a minimal slide show based on the example below or use the example file provided. A very simple beamer **.tex** file could look like this:

```
\documentclass[pdf]{beamer}
% Put packages here
\usetheme{Warsaw} % Choose a theme
\usecolortheme{rose} % Choose a colour scheme
\title{My first slideshow}
\subtitle{I hope you like it}
\author{Susan Hutchinson}
\institute{University of Oxford}
\date{Michaelmas 2014}
% End of preamble
\begin{document}
\maketitle
\begin{frame}
\frametitle{Outline}
\tableofcontents
\end{frame}
\section{Introduction}
\begin{frame}
\frametitle{My first slide}
Contains very little information
\end{frame}
\end{document}
```

- Save this in a new project called **slideshow** and compile it with **LaTeX => PDF**.
 - Open the PDF with okular then select **View ► Presentation**. You should now be able to use the arrow or **Page Up** and **Page Down** keys to display the slides.
- ii. Develop your slide show by changing themes and colours. The lines

```
\usetheme{Warsaw}
\usecolortheme{rose}
```

are used to set up the theme and colour scheme. Change and recompile your slide show a couple of times with different themes and colours. Do not spend too long on this. Many of the installed themes and colours are listed in the Tables 1 and 2.

AnnArbor	Antibes	Bergen	Berkeley	Berlin	Boadilla
CambridgeUS	Copenhagen	Darmstadt	Dresden	Frankfurt	Goettingen
Hannover	Ilmenau	JuanLesPins	Luebeck	Marburg	Madrid
PaloAlto	Pittsburgh	Rochester	Singapore	Szeged	Warsaw

Table 1: Some Beamer themes

albatross	beaver	beetle	crane	dolphin	dove	fly
lily	orchid	rose	seagull	seahorse	whale	wolverine

Table 2: Some Beamer colours

iii. Make the following changes to your slide show

- Add some more content so that there are three or four slides
- Add some maths.
- Add pauses and overlays; the slides contain some examples of the markup for pauses and overlays.
- Add at least one more `\section` command before a frame so that the contents of the second slide is changed. Remember that you will need to compile twice in order for new sections to be displayed.

iv. Explore the examples provided and the package documentation in the **beamer** package folder.

v. Using the **beamer** documentation **Help ► TexDoc [Selection]** and Google see if you can work out how to create a handout rather than a presentation. In the handout version slides with pauses and overlays appear as one slide with all the information, rather than a series of slides.

If you have time...

Using the **beamer** documentation and Google if you get stuck, see if you can add a movie to your slide show. You can download a movie file from http://www.stats.ox.ac.uk/pub/susan/oucs_latex/movie.avi. Apologies for the poor quality and to those who don't enjoy cycling!

1.1 Answer

There may well be other solutions but I found the following was needed to make the movie display

- i. Add `\usepackage{multimedia}` to the preamble.
- ii. Add `\movie[width=5cm, height=4cm]{Play me}{movie.avi}` to the frame.

When viewing the PDF in okular, clicking on **Play me** played the movie.