

L^AT_EX: The Language of Scientific Writing

TEQIP-III Sponsored FDP

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Outline

- 1 Basic Slides
- 2 Simple Beamer class for Slides
- 3 Beamer Class a little nicer
- 4 Split screen
- 5 Pictures
- 6 Transition Effects
- 7 Movies and Verbatim Environment

Making of Basic Slides

• The Slide Class:

- 1 Start with `\documentclass{slides}`.
- 2 Surround the document with `\begin{document}` and `\end{document}` commands.
- 3 Surround the text that you want to appear on each slide with `\begin{slide}` and `\end{slide}` commands.
- 4 Preview the slides to see where best to break the material between slides.

Simple Beamer Class

Make the Presentation Nice and Interactive Using
Beamer Class

Simple Beamer Class

```
\documentclass{beamer}

\title{Simple Beamer Class}
\author{Your Name}
\date{\today}

\begin{document}

\frame{\titlepage}

\frame{\frametitle{Table of contents}\tableofcontents}

\end{document}
```

Title

Each frame should have a title.

Without title somethink is missing.

Unnumbered lists

```
\begin{itemize}
```

```
\item Introduction to \LaTeX
```

```
\item Course 2
```

```
\item Termpapers and presentations  
with \LaTeX
```

```
\item Beamer class
```

```
\end{itemize}
```

- Introduction to \LaTeX
- Course 2
- Termpapers and presentations with \LaTeX
- Beamer class

Lists with pause

- Introduction to L^AT_EX

Lists with pause

- Introduction to L^AT_EX
- Course 2

Lists with pause

- Introduction to L^AT_EX
- Course 2
- Term papers and presentations with L^AT_EX

Lists with pause

- Introduction to L^AT_EX
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Lists with pause

- Introduction to L^AT_EX
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Lists with pause

```
\begin{itemize}
```

```
\item Introduction to \LaTeX \pause
```

```
\item Course 2 \pause
```

```
\item Term papers and presentations with \LaTeX \pause
```

```
\item Beamer class
```

```
\end{itemize}
```

Numbered lists

```
\begin{enumerate}

\item Introduction to \LaTeX
\item Course 2
\item Term papers and presentations
with \LaTeX
\item Beamer class

\end{enumerate}
```

- 1 Introduction to \LaTeX
- 2 Course 2
- 3 Term papers and presentations with \LaTeX
- 4 Beamer class

Numbered lists with pause

1 Introduction to L^AT_EX

Numbered lists with pause

- 1 Introduction to L^AT_EX
- 2 Course 2

Numbered lists with pause

- 1 Introduction to L^AT_EX
- 2 Course 2
- 3 Term papers and presentations with L^AT_EX

Numbered lists with pause

- ❶ Introduction to L^AT_EX
- ❷ Course 2
- ❸ Term papers and presentations with L^AT_EX
- ❹ Beamer class

Numbered lists with pause

- ❶ Introduction to L^AT_EX
- ❷ Course 2
- ❸ Term papers and presentations with L^AT_EX
- ❹ Beamer class

Numbered lists with pause

```
\begin{enumerate}
```

```
\item Introduction to \LaTeX \pause
```

```
\item Course 2 \pause
```

```
\item Term papers and presentations with \LaTeX \pause
```

```
\item Beamer class
```

```
\end{enumerate}
```

Tables

```
\begin{tabular}{|c|c|c|}  
\hline  
\textbf{Date} & \textbf{Instructor} & \textbf>Title} \\  
\hline  
WS 04/05 & Sascha Frank & First steps with \LaTeX \\  
\hline  
SS 05 & Sascha Frank & \LaTeX \ Course serial \\  
\hline  
\end{tabular}
```

Date	Instructor	Title
May 20, 2018	David	First steps with L ^A T _E X
May 20, 2018	John	L ^A T _E X Course serial

Tables with pause

A B C

Tables with pause

A	B	C
1	2	3

Tables with pause

A	B	C
1	2	3
A	B	C

Tables with pause

```
\begin{tabular}{c c c}  
A & B & C \\  
\pause  
1 & 2 & 3 \\  
\pause  
A & B & C \\  
\end{tabular}
```

Blocks

```
\begin{block}{title of the bloc}  
bloc text  
\end{block}
```

```
\begin{exampleblock}{title of the bloc}  
bloc text  
\end{exampleblock}
```

```
\begin{alertblock}{title of the bloc}  
bloc text  
\end{alertblock}
```

Blocks

title of the bloc

bloc text

title of the bloc

bloc text

title of the bloc

bloc text

Beamer Class a little nicer

By adding the different theme packages we can make some nice slides.

Use `"\usepackage{beamerthemesplit}"` after `"\documentclass{beamer}"`

or

Use `"\usepackage{beamerthemeshadow}"` after `"\documentclass{beamer}"`

Split screen

```
\begin{columns}
```

```
\begin{column}{5cm}
```

or

```
\column{.5\textwidth}
```

```
\begin{itemize}
```

```
\item Beamer
```

```
\item Beamer Class
```

```
\item Beamer Class Latex
```

```
\end{itemize}
```

```
\end{column}
```

```
\begin{column}{5cm}
```

or

```
\column{.5\textwidth}
```

```
\begin{tabular}{|c|c|}
```

```
\hline
```

```
\textbf{Inst.} & \textbf{Title} \\
```

```
\hline
```

```
Sascha Frank & \LaTeX \ Course 1 \\
```

```
\hline
```

```
Sascha Frank & Course serial \\
```

```
\hline
```

```
\end{tabular}
```

```
\end{column}
```

```
\end{columns}
```

Pictures

```
\begin{figure}  
\includegraphics[scale=0.5]{PIC1}  
\caption{show an example picture}  
\end{figure}
```

Pictures



Figure: show an example picture



Joining picture and lists

```
\begin{columns}
\begin{column}{5cm}
\begin{itemize}
\item<1-> subject 1
\item<3-> subject 2
\item<5-> subject 3
\end{itemize}
\vspace{3cm}
\end{column}
\end{columns}
```

```
\begin{column}{5cm}
\begin{overprint}
\includegraphics<2>{PIC1}
\includegraphics<4>{PIC2}
\includegraphics<6>{PIC3}
\end{overprint}
\end{column}
\end{columns}}
```

Joining picture and lists

- subject 1

Joining picture and lists

- subject 1

PIC 1

Joining picture and lists

- subject 1
- subject 2

Joining picture and lists

- subject 1
- subject 2

PIC 2

Joining picture and lists

- subject 1
- subject 2
- subject 3

Joining picture and lists

- subject 1
- subject 2
- subject 3

PIC 3

pictures which need more space

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

```
\end{frame}
```




Figure: show an example picture

Transition Effects

use any one of the following with `\begin{frame}`

<code>\transblindshorizontal</code>	Horizontal blinds pulled away
<code>\transblindsvertical</code>	Vertical blinds pulled away
<code>\transboxin</code>	Move to center from all sides
<code>\transboxout</code>	Move to all sides from center
<code>\transdissolve</code>	Slowly dissolve what was shown before
<code>\transglitter</code>	Glitter sweeps in specified direction
<code>\transwipe</code>	Sweeps single line in specified direction
<code>\transduration{2}</code>	Show slide specified number of seconds

Movies and Verbatim environment

```
\usepackage{multimedia}  
...  
\frame{  
\movie[height=1.125in,width=1.5in,poster]{}{Chemotaxis.mov}  
}
```

- `\movie[options]{text, picture, etc to click on }{name of movie }`
- Should support all major movie types: .avi, .mov, etc. Problems: make sure Acrobat has the correct plug-ins!!!

You cannot use **verbatim** without specifying it in the frame options:

```
\frame[containsverbatim]{ \frametitle{ }  
\begin{verbatim}  
. . . contents . . .  
\end{verbatim}  
}
```

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Movies and Verbatim Environment

Movies

Thank You