

# Introduction to L<sup>A</sup>T<sub>E</sub>X Part III

for MST-Students

Sascha Frank

IFI

01.12.2011

## 1 Outline

## 2 packages

- tabularx
- booktabs
- (x)color
- Pdfpages
  - n auf 1
- Hyperref
  - Links & Co.

## 3 presentation

- beamer class
- blocs
- split screen
- Pictures
- joining picture and lists

- Basic
- Scientific Writing
- Usepackages, Presentation etc.

```
\begin{tabularx}{\linewidth}{lX}
column 1 & column 2\\
\hline
A & Wieder mal viel Text, der wie immer keinen
besonderen Sinn erf"ullt,
sondern einfach nur Platz f"ullen soll.\\
B & Der Text hat genau so viel Sinn wie der obige Text. \\
\end{tabularx}
```

```

\begin{tabularx}{\linewidth}{lX}
column 1 & column 2\\
\hline
A & Wieder mal viel Text, der wie immer keinen
besonderen Sinn erf"ullt,
sondern einfach nur Platz f"ullen soll.\\
B & Der Text hat genau so viel Sinn wie der obige Text. \\
\end{tabularx}

```

| column 1 | column 2   |
|----------|--|
| A        | Wieder mal viel Text, der wie immer keinen besonderen Sinn erfüllt, sondern einfach nur Platz füllen soll. |
| B        | Der Text hat genau so viel Sinn wie der obige Text.  |

```
\begin{tabular}{@{}llr@{}} \toprule
\multicolumn{2}{c}{Study}\ \ \cmidrule(r){1-2}
Subject & Duration & Income (\$)\ \ \midrule
Info & 2 & 12.75 \ \
MST & 6 & 8.20 \ \
VWL & 14 & 10.00\ \ \bottomrule
\end{tabular}
```

```
\begin{tabular}{@{}l1r@{}} \toprule
\multicolumn{2}{c}{Study} \\ \cmidrule(r){1-2}
Subject & Duration & Income (\$) \\ \midrule
Info & 2 & 12.75 \\
MST & 6 & 8.20 \\
VWL & 14 & 10.00 \\ \bottomrule
\end{tabular}
```

---

| Study   |          |             |
|---------|----------|-------------|
| Subject | Duration | Income (\$) |
| Info    | 2        | 12.75       |
| MST     | 6        | 8.20        |
| VWL     | 14       | 10.00       |

---

package

xcolor



package

xcolor

Default colors

red, green, blue, cyan, magenta, yellow, black, white, darkgray, gray,  
lightgray

package

xcolor

Default colors

red, green, blue, cyan, magenta, yellow, black, white, darkgray, gray,  
lightgray

extension

```
\definecolor{color name}{color Set}{value,value,value}  
\definecolor{AliceBlue}{rgb}{0.94,0.97,1}
```

package

xcolor

Default colors

red, green, blue, cyan, magenta, yellow, black, white, darkgray, gray,  
lightgray

extension

```
\definecolor{color name}{color Set}{value,value,value}  
\definecolor{AliceBlue}{rgb}{0.94,0.97,1}
```

application

pages, font, frame or fields

package

pdfpages

package

pdfpages

application

including of pdf file(s)

package

pdfpages

application

including of pdf file(s)

options

final, draft and enable-survey

package

pdfpages

application

including of pdf file(s)

options

final, draft and enable-survey

implementation

```
\usepackage{pdfpages}
```

all pages

```
\includepdf [pages=-] {file}
```



all pages

```
\includepdf [pages=-] {file}
```

all pages reverse order

```
\includepdf [pages=last-1] {file}
```

all pages

```
\includepdf [pages=-] {file}
```

all pages reverse order

```
\includepdf [pages=last-1] {file}
```

from ... to ...

```
\includepdf [pages={2-7}] {file}
```

particular page(s)

```
\includepdf [pages={2,4,6}] {file}
```

## particular page(s)

```
\includepdf [pages={2,4,6}] {file}
```

## empty page

```
\includepdf [pages={2, {}, 4}] {file}
```

## particular page(s)

```
\includepdf [pages={2,4,6}] {file}
```

## empty page

```
\includepdf [pages={2, {}, 4}] {file}
```

## mixture

```
\includepdf [pages={2-7,2,4, {}, 6}] {file}
```

# nup and alignment

nup

nup=<Number Columns>x<Number Rows>

# nup and alignment

## nup

nup=<Number Columns>x<Number Rows>

## 2 on 1

```
\includepdf[pages={from to}, nup = 1x2]{file}
```

```
\includepdf[pages={from to}, nup = 2x1]{file}
```

# nup and alignment

nup

nup=<Number Columns>x<Number Rows>

2 on 1

```
\includepdf[pages={from to}, nup = 1x2]{file}
```

```
\includepdf[pages={from to}, nup = 2x1]{file}
```

$nup = 1 \times 2 \neq nup = 2 \times 1$



# nup and alignment

## nup

`nup=<Number Columns>x<Number Rows>`

## 2 on 1

```
\includepdf[pages={from to}, nup = 1x2]{file}
```

```
\includepdf[pages={from to}, nup = 2x1]{file}
```

$nup = 1 \times 2 \neq nup = 2 \times 1$

## alignment

portrait is default

# nup and alignment

## nup

`nup=<Number Columns>x<Number Rows>`

## 2 on 1

```
\includepdf[pages={from to}, nup = 1x2]{file}
```

```
\includepdf[pages={from to}, nup = 2x1]{file}
```

$nup = 1 \times 2 \neq nup = 2 \times 1$

## alignment

portrait is default

## landscape

```
\includepdf[landscape=true,pages=-]{file}
```

```
frames
```

```
frame= true
```

# additional

frames

```
frame= true
```

delta

```
delta=Xmm Xmm
```

frames

```
frame= true
```

delta

```
delta=Xmm Xmm
```

## Beamer Class Handout

```
\includepdf[pages=-,nup= 2x2,frame= true,  
delta=3mm 3mm]{Handout-classic}
```

## frames

```
frame= true
```

## delta

```
delta=Xmm Xmm
```

## Beamer Class Handout

```
\includepdf [pages=-,nup= 2x2,frame= true,  
delta=3mm 3mm]{Handout-classic}
```

## offset

```
offset=Xmm Xmm
```

## frames

```
frame= true
```

## delta

```
delta=Xmm Xmm
```

## Beamer Class Handout

```
\includepdf[pages=-,nup= 2x2,frame= true,  
delta=3mm 3mm]{Handout-classic}
```

## offset

```
offset=Xmm Xmm
```

## signature

```
\includepdf[pages=-7, signature=4, landscape]{file}
```

package

hyperref



package

hyperref

jumping

reference

package

hyperref

jumping

reference

document

properties

package

hyperref

jumping

reference

document

properties

opening

Start

default

```
\usepackage{hyperref}
```

## default

```
\usepackage{hyperref}
```

## link properties

mode, looking, color

## default

```
\usepackage{hyperref}
```

## link properties

mode, looking, color

## pdf properties

info, openings, etc.

## default

```
\usepackage{hyperref}
```

## link properties

mode, looking, color

## pdf properties

info, openings, etc.

## options

draft, debug, implicit, ...

## default references

cite, ref and footnotes



## default references

cite, ref and footnotes

## references

URLs

## default references

cite, ref and footnotes

## references

URLs

## bookmarks

headings

switch off default reference

```
\usepackage[implicit=false]{hyperref}
```

## switch off default reference

```
\usepackage[implicit=false]{hyperref}
```

## URLs

```
\href{http://www.namsu.de}{\LaTeX{} Course}  
\href{mailto:test@example.net}{eMail to test}
```

## switch off default reference

```
\usepackage[implicit=false]{hyperref}
```

## URLs

```
\href{http://www.namsu.de}{\LaTeX{} Course}  
\href{mailto:test@example.net}{eMail to test}
```

## bookmark options

```
\usepackage[bookmarksopen]{hyperref}  
\usepackage[bookmarksopenlevel=section]{hyperref}
```

# links and their color

link name

link

cite

url

# links and their color

## link name

`link`

`cite`

`url`

## link color

```
\usepackage[<name>color=<Farbe>]{hyperref}
```

```
\usepackage[urlcolor=blue]{hyperref}
```

## link name

link

cite

url

## link color

```
\usepackage[<name>color=<Farbe>]{hyperref}
```

```
\usepackage[urlcolor=blue]{hyperref}
```

## link frame color

```
\usepackage[<name>bordercolor=<RGB-Code>]{hyperref}
```

```
\usepackage[urlbordercolor=1 0 1]{hyperref}
```



## additional

```
\hypersetup{colorlinks=false}
```

or

```
\usepackage[colorlinks=false,  
            urlbordercolor=1 0 1]{hyperref}
```

```
\hypersetup{
  pdftitle      = {title},
  pdfsubject    = {subject },
  pdfauthor     = {author or authors},
  pdfkeywords   = {keyword 1, keyword 2 ...} ,
  pdfcreator    = {which application pdflatex},
  pdfproducer   = {LaTeX with hyperref}
}
```

whole page

```
\usepackage[pdfstartview={Fit}]{hyperref}
```

## whole page

```
\usepackage[pdfstartview={Fit}]{hyperref}
```

## height

```
\usepackage[pdfstartview={FitV}]{hyperref}
```

## whole page

```
\usepackage[pdfstartview={Fit}]{hyperref}
```

## height

```
\usepackage[pdfstartview={FitV}]{hyperref}
```

## width

```
\usepackage[pdfstartview={FitH}]{hyperref}
```

```
\documentclass{beamer}
\setbeamertemplate{navigation symbols}{}
\usepackage{beamerthemeshadow}

\begin{document}
\title{Beamer Class well nice}
\author{Sascha Frank}
\date{\today}
```

```
\begin{frame}  
\titlepage  
\end{frame}
```

```
\begin{frame}  
\frametitle{Table of contents}  
\tableofcontents  
\end{frame}
```



```
\begin{itemize}
\item Introduction to \LaTeX \pause
\item Course 2 \pause
\item Termpapers and presentations with \LaTeX \pause
\item Beamer class
\end{itemize}
```

```
\begin{itemize}
\item Introduction to \LaTeX \pause
\item Course 2 \pause
\item Termpapers and presentations with \LaTeX \pause
\item Beamer class
\end{itemize}
```

- Introduction to  $\LaTeX$

```
\begin{itemize}
\item Introduction to \LaTeX \pause
\item Course 2 \pause
\item Termpapers and presentations with \LaTeX \pause
\item Beamer class
\end{itemize}
```

- Introduction to  $\LaTeX$
- Course 2

```
\begin{itemize}
\item Introduction to \LaTeX \pause
\item Course 2 \pause
\item Termpapers and presentations with \LaTeX \pause
\item Beamer class
\end{itemize}
```

- Introduction to  $\LaTeX$
- Course 2
- Termpapers and presentations with  $\LaTeX$

```
\begin{itemize}
\item Introduction to \LaTeX \pause
\item Course 2 \pause
\item Termpapers and presentations with \LaTeX \pause
\item Beamer class
\end{itemize}
```

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

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

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

title of the bloc

bloc text

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

title of the bloc

bloc text

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



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

title of the bloc

bloc text

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

title of the bloc

bloc text

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

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

title of the bloc

bloc text

```

\begin{columns}
\begin{column}{5cm}
\begin{itemize}
\item Beamer
\item Beamer Class
\item Beamer Class Latex
\end{itemize}
\end{column}
\begin{column}{5cm}
\begin{tabular}{|c|c|}
\hline
\textbf{Instructor} & \textbf{Title} \\
\hline
Sascha Frank & \LaTeX \ Course 1 \\
\hline
Sascha Frank & Course serial \\
\hline
\end{tabular}
\end{column}
\end{columns}

```

- Beamer
- Beamer Class
- Beamer Class Latex

| Instructor   | Title                                    |
|--------------|--|
| Sascha Frank | L <sup>A</sup> T <sub>E</sub> X Course 1 |
| Sascha Frank | Course serial                            |

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

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

- subject 1



- subject 1

PIC 1

- subject 1
- subject 2

- subject 1
- subject 2

PIC 2

- subject 1
- subject 2
- subject 3

- subject 1
- subject 2
- subject 3

## PIC 3

```
\begin{frame}[plain]
\frametitle{plain, or a way to get more space}
\begin{figure}
\includegraphics[scale=0.5]{PIC1}
\caption{show an example picture}
\end{figure}
\end{frame}
```

plain, or a way to get more space

PIC 1

Figure: show an example picture