

L^AT_EX for Advanced (PIASTA)

Monica Gavrilă

University of Hamburg

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Outline

Organizational Things

Long Documents

Beamer

Poster

Discussions and Feedback

Let us know each other

- ▶ Name, Surname
- ▶ Country of origin
- ▶ Faculty, Department
- ▶ "I like ..."
- ▶ " I do not like ..."

PIASTA - Intercultural Living and Learning

UHH > PIASTA

- ▶ Neuigkeiten
- ▶ Veranstaltungen
- ▶ Information und Beratung
- ▶ Community
- ▶ Über PIASTA

Interkulturelles Leben und Studieren



WELCOME! أهلاً وسهلاً
Willkommen! Hoş geldiniz!
欢迎
Serdecznie witamy!
خوش آمدید
Bienvenue! Добро пожаловать!
¡Bienvenido!

News

Aktuelle Informationen, unseren Newsletter und das Programmheft findet ihr [hier](#)...

Certificate Intercultural Competence [Info](#)

PIASTA - Next Activities

- ▶ The World Wide Web, the Arab Spring and the New Dignity of Man (PIASTA-Cafe, 9.11.2011, 18:00-21:00)
- ▶ Christmas Walking Tour of Luneburg (04.12.2011)
- ▶ Intercultural Competence for Everyday, University, and Career (13-14.01.2012)
- ▶ A Special Evening at the Thalia Theater (20.12.2011)
- ▶ All You Need to Know About the Doctorate (17.11.2011, 18:00-20:00)
- ▶ How to Successfully Manage Your Ph.D. (8.12.2011, 16:00-19:00)

Program

10:00–10:30	Organizational
10:30–11:00	Remembering..., Logging in
11:00–11:30	Long Documents (book)
11:30–12:30	DO IT YOURSELF: Exercises
12:30–13:15	Break
13:15–13:45	Presentations (beamer)
13:45–14:45	DO IT YOURSELF: Exercises
14:45–15:00	Break
15:00–15:30	Posters (a0poster)
15:30–16:30	DO IT YOURSELF: Exercises
16:30–17:00	Discussions, Feedback

Expectations, Worries and Rules

2 Expectations
2 Worries
1 Rule

Previous Knowledge

Previous Knowledge

Goals

- ▶ Get to know how to organize the information and how to use LaTeX for a long document: document structure, references, arranging floats, indexes, etc.
- ▶ Be able to use the beamer package and create a presentation
- ▶ Be able to use the A0poster package and create a poster

Materials: Hand-out Links and Materials uploaded on:

<https://nats-www.informatik.uni-hamburg.de/view/User/LaTeXNovember>

Supposed Known

- ▶ What is LaTeX
- ▶ The LaTeX Document Structure (for document class article)
- ▶ Text formatting, lists, pictures, tables (including multi-columns, multi-rows, etc.), mathematical formulas, bibliography and bibtex, etc.
- ▶ (Using JabRef for the bibliography management)
- ▶ Using and adapting a template for articles (journal - real example)

Need to Remember?

- ▶ floats
- ▶ bibliography
- ▶ cross-references
- ▶ index
- ▶

Software used in the Seminar

- ▶ Engine: MikTeX
- ▶ Editor: TexnicCenter (TeXworks)
- ▶ Bibliography: JabRef (P:/Pool/JabRef-2.7)

0.Organizational

- ▶ Exercises: 0.Organizational

Long documents

Program:

- ▶ Exercises: 1. Long Documents

Long Documents

Working with Projects Advantages: All in one!

Document Structure

```
\documentclass[a4paper,twoside,11pt]{book or report}  
\usepackage{...}  
(\makeindex)
```

Also: author, title, etc.

```
\begin{document}  
\maketitle  
\frontmatter  
\tableofcontents  
\listoffigures  
\listoftables
```

(Also: Dedication, declaration, thanks, summary, abbreviations...)

Document Structure

```
\mainmatter  
\include{chapters...}  
\appendix  
\includeappexixes ....  
\backmatter  
\bibliographystyle{STYELE}  
\bibliography{FILE}  
\printindex  
\end{document}
```

Brainstorming

- ▶ Thesis Template: Brainstorming in teams (TEAM): 10 minutes
- ▶ Presentation of the ideas and Discussions (ALL): 10 minutes
- ▶ Analyzing the template

Do it yourself

DO IT YOURSELF - Work with the template
Please check also handout for more details.

BREAK

Lunch Break

Presentations

There are several possibilities:

- ▶ prosper - LaTeX class for high quality slides.
- ▶ TEXPowder - Create dynamic online presentations with LaTeX.
- ▶ FoilTEX - A LaTeX2e class for overhead transparencies
- ▶ beamer - A LaTeX class for producing presentations and slides.

We use:

beamer - `\documentclass[Options]beamer`. Options: handout, notes, notes=only, trans, red, compress, draft, etc. Layout of the presentation is provided by the themes (see Handout).

Slides

```
\begin{frame}  
\frametitle{Title}  
Content of the slide  
\end{frame}  
or  
\frame{  
\frametitle{Title}  
Content of the slide  
}
```

Title Slide

- ▶ All after `\begin {document}`
- ▶ `\title[Short title]{Title}`
- ▶ `\subtitle[Short Subtitle]{Subtitle}`
- ▶ `\date{...}`
- ▶ `\author{Name1\inst{1} \and Name2\inst{2}}`
- ▶ `\institute[Short]{.... \inst{1} \and \inst{2}.....}`
- ▶ `\titlegraphic{\includegraphics{logo}}`

Create slide with: `\titlepage`

Overlays

```
\begin{itemize}[< + - | alert@+ >]
```

```
\item 1st point
```

```
\item 2nd point
```

```
\item 3rd point
```

```
\end{itemize}
```

(More commands see in Handout)

Sectioning and Contents

Sectioning:

- ▶ `\part[description]{Title}`
- ▶ `\section` (also `\section*{}`)
- ▶ `\subsection` (also `\subsection*{}`)

Contents: `\tableofcontents[Options]`. For the Options - see Handout.

Blocks

```
\begin{block}{Title}
```

Text

```
\end{block}
```

You can use also: *alertblock* and *exampleblock*. Layout depends on the general setting of the presentation.

More columns

```
\begin{columns}[Options]
```

```
\begin{column}{SIZE}
```

...

```
\end{column}
```

.....

```
\end{columns}
```

For more details, see Handout

Videos

(Loading movie...)

Videos

`\usepackage{movie15}` (sometimes the package used is multimedia!!)

`\includemovie[poster, controls, repeat, text=(Loading movie...)]{4cm}{4cm}{output.avi}`

Animations

Test
test test

Animations

Testing an animation

text text

Animations 2

```
\only<1>{ \begin{block}{Test} test test \end{block} }  
\only<2>{ \begin{block}{Testing an animation} text text  
\end{block} } \transdissolve <2>
```


Other Animations

- ▶ `transdissolve`
- ▶ `transboxout` und `transboxin`
- ▶ `transblindshorizontal` und `transblindsvERTICAL`
- ▶ `transsplitverticalin` und `transsplitverticalout`
- ▶ `transglitter`
- ▶ `transwipe`

Do It Yourself

DO IT YOURSELF

Please check also handout for more details.

BREAK

Break

Poster

- ▶ poster-mac - Make posters and banners with TeX.
- ▶ poster - Scale PostScript images for larger media or tiling.
- ▶ sciposter - Make posters of ISO A3 size and larger.
- ▶ beamerposter - Extend beamer and a0poster for custom sized posters.
- ▶ a0poster - Support for designing posters on large paper.
- ▶ bigsign - Making big signs (mini-posters).
- ▶ sectionbox - Create fancy boxed ((sub)sub)sections.

A0poster

a0poster is a class like *article*. There are the following options:

- ▶ landscape landscape format, is default
- ▶ portrait portrait format
- ▶ a0 DIN A0
- ▶ posterdraft reduces the postscript output to DIN A4 size, so test printings can be made with ordinary DIN A4 printers.
- ▶ final makes postscript output in original size; is default.
- ▶ (For more possibilities, see the Handout)

It is based on the *article* class, so all commands of this class can be used.

The Beginning of a Document

```
\documentclass[portrait,a0b,posterdraft]{a0poster}  
\usepackage{.....}  
\begin{document}
```

We usually place the elements on the poster. We see the page somehow split in a grid.

Placing elements:

- ▶ `\put(x-coord,y-coord){object}`. The command places the object specified by the mandatory argument at the given coordinates. The coordinates are in units of default unit length.
- ▶ Using text boxes - The text boxes are created with the fancybox package (see documentation)
- ▶ Using text blocks and the package textpos

Other packages

In addition the `textpos` stylesheet lets you position text in the poster.

```
\usepackage{textpos}  
or \usepackage[absolute]{textpos}
```


Setting up the grid

The position of the grid in which the text is placed is setup with the command: `\TPGrid[40mm,40mm]{23}{12}`
Note that `[40mm,40mm]` is the margin round the edge of the page. Here we use a 23×12 grid. This gives us, for example, four columns of width 5 boxes, with a gap of width 1 in between them. The same dimension allows, eg, three columns of width 7, with gaps of 1 in between. We have also 12 vertical boxes.

Textblocks

Understanding textblocks is the key to being able to do a poster in LaTeX. In the LaTeX file, text is placed in blocks using the commands:

```
\begin{textblock}{wid}(x,y)
```

...

```
\end{textblock}
```

the first argument gives the block width in units of the grid cells specified in `\TPGrid`; the second gives the (x,y) position on the grid, with the y axis pointing down.

Note: You will probably have to view the output (more than) a few times to check that the positioning is ok.

Do It Yourself

Do It Yourself

Please check also handout for more details.

Discussions and Feedback

- ▶ Discussions
- ▶ Feedback
- ▶

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