Slides and Course Notes*

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Abstract

We present a document class from which we can generate both course slides and course notes in a transparent way.

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^{*}Version ? (last revised ?)

1 Introduction

The mikoslides document class is derived from beamer.cls [Tana], it adds a "notes version" for course notes derived from the omdoc class [Kohlhase:smomdl] that is more suited to printing than the one supplied by beamer.cls.

2 The User Interface

The mikoslides class takes the notion of a slide frame from Till Tantau's excellent beamer class and adapts its notion of frames for use in the STEXand OMDoc. To support semantic course notes, it extends the notion of mixing frames and explanatory text, but rather than treating the frames as images (or integrating their contents into the flowing text), the mikoslides package displays the slides as such in the course notes to give students a visual anchor into the slide presentation in the course (and to distinguish the different writing styles in slides and course notes).

In practice we want to generate two documents from the same source: the slides for presentation in the lecture and the course notes as a narrative document for home study. To achieve this, the mikoslides class has two modes: *slides mode* and *notes mode* which are determined by the package option.

2.1 Package Options

The mikoslides class takes a variety of class options:¹

slides

• The options slides notes notes switch between slides mode and notes mode (see Section 2.2).

sectocframes

mes •

• If the option sectocframes is given, then special frames with section table of contents are produced headers ²

showmeta

• showmeta. If this is set, then the metadata keys are shown (see [Koh18b] for details and customization options).

frameimages fiboxed

• If the option frameimages is set, then slide mode also shows the \frameimage-generated frames. If also the fiboxed option is given, the slides are surrounded by a box.

topsect

mh

frame

note

- topsect= $\langle sect \rangle$ can be used to specify the top-level sectioning level; the default for $\langle sect \rangle$ is section.
- The mh option turns on MathHub support; see [Koh18a].

2.2 Notes and Slides

Slides are represented with the frame just like in the beamer class, see [Tanb] for details. The mikoslides class adds the note environment for encapsulating the

2

EdN:1

EdN:2

 $^{^{1}\}mathrm{EdNote}$: leaving out noproblems for the moment until we decide what to do with it.

 $^{^2\}mathrm{EdNote}\colon \mathsf{document}$ the functionality

course note fragments.¹

Note that it is essential to start and end the notes environment at the start of the line – in particular, there may not be leading blanks – else IATEX becomes confused and throws error messages that are difficult to decipher.

```
\ifnotes\maketitle\else
\frame[noframenumbering]\maketitle\fi

\begin{note}
  We start this course with ...
\end{note}

\begin{frame}
  \frametitle{The first slide}
  ...
\end{frame}
\begin{note}
  ... and more explanatory text
\end{note}

\begin{frame}
  \begin{frame}
  ... and sore explanatory text
\end{frame}
\chancel{frame}
  \frametitle{The second slide}
  ...
\end{frame}
  ...
\end{frame}
```

Example 1: A typical Course Notes File

By interleaving the frame and note environments, we can build course notes as shown in Figure 1.

\ifnotes

Note the use of the \ifnotes conditional, which allows different treatment between notes and slides mode – manually setting \notestrue or \notesfalse is strongly discouraged however.

A: We need to give the title frame the noframenumbering option so that the frame numbering is kept in sync between the slides and the course notes.

A: The beamer class recommends not to use the allowframebreaks option on frames (even though it is very convenient). This holds even more in the mikoslides case: At least in conjunction with \newpage, frame numbering behaves funnily (we have tried to fix this, but who knows).

Sometimes, we want to integrate slides as images after all – e.g. because we already have a PowerPoint presentation, to which we want to add STEXnotes. In this case we can use $\frac{\langle opt \rangle}{\langle path \rangle}$, where $\langle opt \rangle$ are the options of $\frac{\langle opt \rangle}{\langle opt \rangle}$ is the file path (extension can be left off like in $\frac{\langle opt \rangle}{\langle opt \rangle}$). We have added the label

\frameimage

¹MK: it would be very nice, if we did not need this environment, and this should be possible in principle, but not without intensive LaTeX trickery. Hints to the author are welcome.

EdN:3

key that allows to give a frame label that can be referenced like a regular ${\tt beamer}$ frame.

If we want to transclude a the contents of a file as a note, we can use the \inputref* \inputref* macro: \inputref*{foo} is equivalent to

\begin{note}
\inputref{foo}
\end{note}

nomtext

There are some environments that tend to occur at the top-level of note environments. We make convenience versions of these: e.g. the nomtext environment is just an omtext inside a note environment (but looks nicer in the source, since it avoids one level of source indenting). Similarly, we have the nomgroup environment.

nomgroup

2.3 Header and Footer Lines

2.4 Colors and Highlighting

\textwarning

The \textwarning macro generates a warning sign:

Front Matter, Titles, etc

- 2.6 Miscellaneous

2.5

3 Limitations

In this section we document known limitations. If you want to help alleviate them, please feel free to contact the package author. Some of them are currently discussed in the STEXGitHub repository [sTeX].

1. when option book which uses \pagestyle{headings} is given and semantic macros are given in the omgroup titles, then they sometimes are not defined by the time the heading is formatted. Need to look into how the headings are made. This is a problem of the underlying omdoc package.

4 The Implementation

4.1 Class and Package Options

We define some Package Options and switches for the mikoslides class and activate them by passing them on to beamer.cls and omdoc.cls and the mikoslides package. We pass the nontheorem option to the statements package when we are

 $^{^3{}m EDNote}$: MK: the hyperref link does not seem to work yet. I wonder why but do not have the time to fix it.

not in notes mode, since the beamer package has its own (overlay-aware) theorem environments.

```
1 \langle *cls \rangle
2 \RequirePackage{stex-base}
3 \RequirePackage{kvoptions}
4 \RequirePackage{etoolbox}
5 \SetupKeyvalOptions{family=mks@cls,prefix=mks@cls@}
6 \DeclareStringOption[article]{class}
10 \DeclareBoolOption{notes}
11 \DeclareComplementaryOption{slides}{notes}
12 \DeclareDefaultOption{%
   \PassOptionsToClass{\CurrentOption}{omdoc}
   \PassOptionsToClass{\CurrentOption}{beamer}
14
   \PassOptionsToPackage{\CurrentOption}{mikoslides}}
16 \ProcessKeyvalOptions{mks@cls}
now we do the same for the mikoslides package.
18 (*package)
19 \RequirePackage{stex-base}
20 \RequirePackage{kvoptions}
21 \SetupKeyvalOptions{family=mks@sty,prefix=mks@sty@}
22 \DeclareStringOption{topsect}
23 \DeclareStringOption{defaulttopsect}
24 \DeclareBoolOption{mh}
25 \AddToKeyvalOption*{mh}{
   \PassOptionsToPackage{mh}{stex}
   \PassOptionsToPackage{mh}{smglom}
27
   \PassOptionsToPackage{mh}{tikzinput}}
29 \newif\ifnotes\notestrue
30 \DeclareBoolOption{notes}
31 \AddToKeyvalOption*{notes}{\notestrue\PassOptionsToPackage{notes}{statements}}
32 \DeclareComplementaryOption{slides}{notes}
{\tt 33 \ AddToKeyvalOption*{slides}{\ notesfalse\ PassOptionsToPackage{nontheorem}{statements}}}
34 \DeclareBoolOption{sectocframes}
35 \AddToKeyvalOption*{sectocframes}{\PassOptionsToPackage{msection}{statements}}
36 \DeclareBoolOption{frameimages}
37 \DeclareBoolOption{fiboxed}
38 \DeclareBoolOption{noproblems}
39 \DeclareDefaultOption{%
   \PassOptionsToPackage{\CurrentOption}{stex}
40
   \PassOptionsToPackage{\CurrentOption}{smglom}
41
   \PassOptionsToPackage{\CurrentOption}{tikzinput}}
43 \ProcessKeyvalOptions{mks@sty}
we give ourselves a macro \@@topsect that needs only be evaluated once, so that
```

the \ifdefstring conditionals work below.

```
44 \ifx\mks@sty@topsect\@empty\edef\@@topsect{\mks@sty@defaulttopsect}
45 \else\edef\@@topsect{\mks@sty@topsect}\fi
46 (/package)
   Depending on the options, we either load the article-based omdoc or the
beamer class (and set some counters).
47 (*cls)
48 \ifmks@cls@notes
   \LoadClass{omdoc}
49
50 \ensuremath{\setminus} \texttt{else}
   \LoadClass[10pt,notheorems,xcolor={dvipsnames,svgnames}]{beamer}
51
    \newcounter{Item}
52
    \newcounter{paragraph}
53
    \newcounter{subparagraph}
54
    \newcounter{Hfootnote}
55
56 \fi
now it only remains to load the mikoslides package that does all the rest.
57 \RequirePackage{mikoslides}
```

In notes mode, we also have to make the beamer-specific things available to article via the beamerarticle package. We use options to avoid loading theorem-like environments, since we want to use our own from the STEX packages. The first batch of packages we want are loaded on mikoslides.sty. These are the general ones, we will load the STEX-specific ones after we have done some work (e.g. defined the counters m*). Only the stex-logo package is already needed now for the default theme.

59 (*package)

```
60 \ifmks@sty@notes
61 \RequirePackage{a4wide}
62 \RequirePackage{marginnote}
63 \RequirePackage[dvipsnames, svgnames] {xcolor}
64 \if@latexml\else\RequirePackage{mdframed}\fi
65 \RequirePackage[noxcolor,noamsthm]{beamerarticle}
66 \fi
67 \RequirePackage{etoolbox}
68 \RequirePackage{amssymb}
69 \RequirePackage{amsmath}
70 \RequirePackage{comment}
71 \RequirePackage{textcomp}
72 \RequirePackage{url}
73 \RequirePackage{graphicx}
74 \RequirePackage{stex-logo}
75 \RequirePackage{pgf}
76 \ifmks@sty@notes
77 \RequirePackage[bookmarks,bookmarksopen,bookmarksnumbered,breaklinks,hidelinks] {hyperref}
78\fi
```

finally, we require the $\mathtt{metakeys}$ package from \mathtt{STEX} , so that we can use the $\mathtt{Addmetakey}$ mechanism.

79 \RequirePackage{metakeys}

4.2 Notes and Slides

For the lecture notes cases, we also provide the \usetheme macro that would otherwise come from the the beamer class. While the latter loads beamertheme $\langle theme \rangle$.sty, the notes version loads beamernotestheme $\langle theme \rangle$.sty.

- 80 \ifmks@sty@notes
- 81 \renewcommand\usetheme[2][]{\usepackage[#1]{beamernotestheme#2}}
- 82 \fi

EdN:4

We define the sizes of slides in the notes. Somehow, we cannot get by with the same here.

- 83 \newcounter{slide}
- $84 \neq \frac{\slidewidth}{\slidewidth}{13cm}$
- 85 \newlength{\slideheight}\setlength{\slideheight}{9cm}

note The note environment is used to leave out text in the slides mode. It does not have a counterpart in OMDoc. So for course notes, we define the note environment to be a no-operation otherwise we declare the note environment as a comment via the comment package.

- 86 \ifmks@sty@notes%
- 87 \renewenvironment{note}{\ignorespaces}{}%
- 88 \else%
- 89 \excludecomment{note}%
- 90 \fi%

We first set up the slide boxes in article mode. We set up sizes and provide a box register for the frames and a counter for the slides.

- 91 \ifmks@sty@notes
- 92 \newlength{\slideframewidth}
- 93 \setlength{\slideframewidth}{1.5pt}

frame We first define the keys.

- 94 \addmetakey{frame}{label}
- 95 \addmetakey[yes]{frame}{allowframebreaks}
- 96 \addmetakey{frame}{allowdisplaybreaks}
- 97 \addmetakey[yes]{frame}{fragile}
- 98 \addmetakey[yes]{frame}{shrink}
- 99 \addmetakey[yes]{frame}{squeeze}

We define the environment, read them, and construct the slide number and label.

- 101 \renewenvironment{frame}[1][]{%
- 102 \metasetkeys{frame}{#1}%
- 103 \sffamily%

 $^{^4\}mathrm{EdNote}\colon$ MK: This is not ideal, but I am not sure that I want to be able to provide the full theme functionality there.

```
\def\@currentlabel{\theslide}%
             105
                     \ifx\frame@label\@empty%
             106
                     \else%
             107
                       \label{\frame@label}%
             108
             109
                     \fi%
              We redefine the itemize environment so that it looks more like the one in beamer.
                     \def\itemize@level{outer}%
             110
                     \def\itemize@outer{outer}%
             111
                     \def\itemize@inner{inner}%
             112
                     \renewcommand\newpage{\addtocounter{framenumber}{1}}%
             113
                     \renewcommand\metakeys@show@keys[2]{\marginnote{{\scriptsize ##2}}}%
             114
                     \renewenvironment{itemize}{%
             115
                       \ifx\itemize@level\itemize@outer%
             116
                         \def\itemize@label{$\rhd$}%
             117
             118
                       \fi%
             119
                       \ifx\itemize@level\itemize@inner%
                         \def\itemize@label{$\scriptstyle\rhd$}%
             120
             121
                       \fi%
                       \begin{list}%
             122
                       {\itemize@label}%
             123
                       {\setlength{\labelsep}{.3em}%
             124
             125
                        \setlength{\labelwidth}{.5em}%
                        \setlength{\leftmargin}{1.5em}%
             126
             127
                       \edef\itemize@level{\itemize@inner}%
             128
                     }{%
             129
                       \left\{ ist\right\} 
             130
             131
                     }%
              We create the box with the mdframed environment from the equinymous package.
                     \begin{mdframed}[linewidth=\slideframewidth,skipabove=1ex,skipbelow=1ex,userdefinedwidth=\s
             132
                  }{%
             133
             134
                     \medskip\miko@slidelabel\end{mdframed}%
             135
                 Now, we need to redefine the frametitle (we are still in course notes mode).
\frametitle
                  \renewcommand{\frametitle}[1]{{\Large\bf\sf\color{blue}{#1}}\medskip}%
             137 \fi %ifmks@sty@notes
             We have to make sure that the width is overwritten, for that we check the
\frameimage
              \Gin@ewidth macro from the graphicx package. We also add the label key.
             138 \end{arabic{slide}} \label{$\{1\}$} arabic{slide}} \label{$\{1\}$} \label{$\{1\}$} arabic{slide}} \label{$\{1\}$} \label{$\{1\}$} arabic{slide}
             139 \newrobustcmd\frameimage[2][]{%
                   \stepcounter{slide}%
             140
                   \ifmks@sty@frameimages%
             141
             142
                     \def\Gin@ewidth{}\setkeys{Gin}{#1}%
             143
                     \ifmks@sty@notes\else\vfill\fi%
```

\stepcounter{slide}%

104

```
\ifmks@sty@fiboxed%
              144
                       145
                     \else
              146
                       \ifx\Gin@ewidth\@empty\mycgraphics[width=\slidewidth,#1]{#2}\else\mycgraphics[#1]{#2}\fi%
              147
              148
              149
                     \par\strut\hfill{\footnotesize Slide \arabic{slide}}%
              150
                     \ifmks@sty@notes\else\vfill\fi%
                   \fi % ifmks@sty@frameimages
              151
              152 }
       \pause
              153 \ifmks@sty@notes\newcommand\pause{}\fi
      nomtext
              154 \ifmks@sty@notes\newenvironment{nomtext}[1][]{\begin{omtext}[#1]}{\end{omtext}}%
              155 \else\excludecomment{nomtext}\fi%
     nomgroup
              156 \ifmks@sty@notes\newenvironment{nomgroup}[2][]{\begin{omgroup}[#1]{#2}}{\end{omgroup}}}%
              157 \else\excludecomment{nomgroup}\fi%
               4.3
                     Header and Footer Lines
               Now, we set up the infrastructure for the footer line of the slides, we use boxes
               for the logos, so that they are only loaded once, that considerably speeds up
               processing.
              The default logo is the logo of Jacobs University. Customization can be done by
\setslidelogo
               \setslidelogo{\langle logo \ name \rangle}.
              158 \newlength{\slidelogoheight}
              159 \ifmks@sty@notes%
                   \setlength{\slidelogoheight}{.4cm}%
              161 \else%
                   \setlength{\slidelogoheight}{1cm}%
              162
              163 \fi%
              164 \newsavebox{\slidelogo}%
              165 \sbox{\slidelogo}{\sTeX}%
              166 \newrobustcmd{\setslidelogo}[1]{%
                   \sbox{\slidelogo}{\includegraphics[height=\slidelogoheight]{#1}}%
              168 }%
              \source stores the writer's name. By default it is Michael Kohlhase since he is
               the main user and designer of this package. \setsource\{\langle name \rangle\} can change the
               writer's name.
              169 \def\source{Michael Kohlhase}\% customize locally
```

EdN:5

170 \newrobustcmd{\setsource}[1]{\def\source{#1}}%

⁵EDNOTE: MK: fake it in notes mode for now

```
Now, we set up the copyright and licensing. By default we use the Creative
              Commons Attribuition-ShareAlike license to strengthen the public domain. If
              package hyperref is loaded, then we can attach a hyperlink to the license logo.
              \setlicensing[\langle url \rangle] {\langle logo\ name \rangle} is used for customization, where \langle url \rangle is op-
              tional.
             171 \def\copyrightnotice{\footnotesize\copyright:\hspace{.3ex}{\source}}%
             172 \newsavebox{\cclogo}%
             173 \sbox{\cclogo}{\includegraphics[height=\slidelogoheight]{cc_somerights}}%
             174 \newif\ifcchref\cchreffalse%
             175 \AtBeginDocument{%
                  \@ifpackageloaded{hyperref}{\cchreftrue}{\cchreffalse}
             176
             177 }%
             178 \def\licensing{%
                  \ifcchref%
             179
                     \href{http://creativecommons.org/licenses/by-sa/2.5/}{\usebox{\cclogo}}%
             180
             181
             182
                     {\usebox{\cclogo}}%
             183
                  \fi%
             184 }%
             185 \newrobustcmd{\setlicensing}[2][]{%
                  \def\@url{#1}%
             186
                   \sbox{\cclogo}{\includegraphics[height=\slidelogoheight]{#2}}%
             187
                  \ifx\@url\@empty%
             188
                    \def\licensing{{\usebox{\cclogo}}}%
             189
                  \else%
             190
                     \def\licensing{%
             191
                       \ifcchref%
             192
                       \href{#1}{\usebox{\cclogo}}%
             193
                       \else%
             194
             195
                       {\usebox{\cclogo}}%
             196
                       \fi%
                    }%
             197
                  \fi%
             198
             199 }%
\slidelabel Now, we set up the slide label for the article mode.<sup>6</sup>
             200 \newrobustcmd\miko@slidelabel{%
                  \vbox to \slidelogoheight{%
             202
                     \vss\hbox to \slidewidth%
                     {\licensing\hfill\copyrightnotice\hfill\arabic{slide}\hfill\usebox{\slidelogo}}%
             203
                 }%
```

4.4 Colors and Highlighting

We first specify sans serif fonts as the default.

206 \sffamily

204 205 }%

EdN:6

 $^{^6\}mathrm{EdNote}$: see that we can use the themes for the slides some day. This is all fake.

Now, we set up an infrastructure for highlighting phrases in slides. Note that we use content-oriented macros for highlighting rather than directly using color markup. The first thing to to is to adapt the green so that it is dark enough for most beamers

```
207 \AtBeginDocument{%
208 \definecolor{green}{rgb}{0,.5,0}%
209 \definecolor{purple}{cmyk}{.3,1,0,.17}%
210 }%
```

We customize the \defemph, \notemph, and \stDMemph macros with colors for the use in the statements package. Furthermore we customize the \@@lec macro for the appearance of line end comments in \lec.

```
211 % \def\STpresent#1{\textcolor{blue}{#1}}
212 \def\defemph#1{{\textcolor{magenta}{#1}}}
213 \ensuremath{\verb| def\termemph#1{{\textcolor{cyan}{\#1}}}}
214 \def\notemph#1{{\textcolor{magenta}{#1}}}
215 \def\stDMemph#1{{\textcolor{blue}{#1}}}
216 \def\@@lec#1{(\textcolor{green}{#1})}
```

I like to use the dangerous bend symbol for warnings, so we provide it here.

\textwarning as the macro can be used quite often we put it into a box register, so that it is only loaded once.

```
217 \pgfdeclareimage[width=.8em]{miko@small@dbend}{dangerous-bend}
218 \def\smalltextwarning{%
    \pgfuseimage{miko@small@dbend}%
220
    \xspace%
221 }%
222 \pgfdeclareimage [width=1.2em] {miko@dbend} {dangerous-bend}
223 \newrobustcmd\textwarning{%
    \raisebox{-.05cm}{\pgfuseimage{miko@dbend}}%
224
    \xspace%
225
226 }%
227 \pgfdeclareimage[width=2.5em]{miko@big@dbend}{dangerous-bend}%
228 \newrobustcmd\bigtextwarning{%
    \raisebox{-.05cm}{\pgfuseimage{miko@big@dbend}}%
    \xspace%
230
231 }%
232 \newrobustcmd\putgraphicsat[3]{%
234 }%
235 \newrobustcmd\putat[2]{%
236 \begin{picture}(0,0)\put(#1){#2}\end{picture}%
237 }%
```

4.5 Sectioning

EdN:7

```
If the sectocframes option is set, then we make section frames. We first define a set of counters<sup>7</sup>
```

```
238 \ifmks@sty@sectocframes%
                                                      239 \ifdefstring\@@topsect{part}{%
                                                                        \newcounter{mpart}\newcounter{mchapter}\newcounter{msection}[mchapter]}
                                                     241 {\ifdefstring\@@topsect{chapter}{%
                                                                               \newcounter{mchapter}\newcounter{msection}[mchapter]}
                                                     242
                                                     243
                                                                       {\newcounter{msection}}}
                                                     244 \newcounter{msubsection} [msection]%
                                                     245 \newcounter{msubsubsection} [msubsection]%
                                                     246 \newcounter{mparagraph} [msubsubsection]%
                                                     247 \fi% ifsectocframes
                                                                    Now that we have defined the counters, we can load the ST<sub>E</sub>X-specific packages
                                                        (in particular statements that needs these counters).
                                                     248 \RequirePackage{stex}
                                                     249 \RequirePackage{smglom}
                                                     250 \RequirePackage{tikzinput}
                                                     251 \ifmks@sty@mh\RequirePackage{mikoslides-mh}\fi
\section@level
                                                                    Finally, we set the \section@level macro that governs sectioning.
                                                     252 \section@level=2
                                                     253 \ifdefstring{\00topsect}{part}{\section0level=0}{}
                                                     254 \left\{ \frac{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conoccolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\conormalcolor{1}{\con
                                                     255 \ifmks@sty@notes\else% only in slides
                                                     256 \end{figure} $$256 \end{fi
                                                     257 \renewenvironment{omgroup}[2][]{%
                                                     258
                                                                        \metasetkeys{omgroup}{#1}\sref@target%
                                                     259
                                                                        \advance\section@level by 1%
                                                     260
                                                                       \ifmks@sty@sectocframes%
                                                     261
                                                                        \stepcounter{slide}
                                                                       \begin{frame} [noframenumbering]%
                                                     262
                                                     263
                                                                       \vfill\Large\centering%
                                                     264
                                                                        \red{%
                                                     265
                                                                               \ifcase\section@level\or
                                                     266
                                                                               \stepcounter{mpart}
                                                                               \def\@@label{\omdoc@part@kw~\Roman{mpart}}
                                                     267
                                                     268
                                                                               \def\currentsectionlevel{\omdoc@part@\kw}
                                                      269
                                                                               \or%
                                                                               \stepcounter{mchapter}
                                                      270
                                                     271
                                                                               \def\@@label{\omdoc@chapter@kw~\arabic{mchapter}}
                                                     272
                                                                               \def\currentsectionlevel{\omdoc@chapter@kw}
                                                     273
                                                                               \or
                                                     274
                                                                               \stepcounter{msection}
                                                                               \def\@@label{\part@prefix\arabic{msection}}
                                                     275
                                                                               \def\currentsectionlevel{\omdoc@section@kw}
                                                     276
```

⁷EDNOTE: I forget: why not use the counters from beamer/article? –¿ document this.

```
277
                  \or
          278
                  \stepcounter{msubsection}
                  \def\@@label{\part@prefix\arabic{msection}.\arabic{msubsection}}
          279
                  \def\currentsectionlevel{\omdoc@subsection@kw}
          280
          281
                  \or
          282
                  \stepcounter{msubsubsection}
          283
                  \def\currentsectionlevel{\omdoc@subsubsection@kw}
          284
                  \or
          285
                  \stepcounter{mparagraph}
          286
                  \def\@@label{\part@prefix\arabic{msection}.\arabic{msubsection}.\arabic{msubsection}.\ar
          287
                  \def\currentsectionlevel{\omdoc@paragraph@kw}
           288
                  \fi% end ifcase
           289
                  \@@label\sref@label@id\@@label
           290
                  \quad #2%
          291
               }%
          292
               \vfill%
          293
               \end{frame}%
          294
          295
               \fi %ifmks@sty@sectocframes
          297 {\advance\section@level by -1}%
          298 fi\% ifmks@sty@notes
\inputref*
          299 \let\orig@inputref\inputref
          300 \def\inputref{\@ifstar\ninputref\orig@inputref}
          301 \newcommand\ninputref[2][]{\ifmks@sty@notes\orig@inputref[#1]{#2}\fi}
                  Miscellaneous
           4.6
           We set up a beamer template for theorems like ams style, but without a block
           environment.
           302 \def\inserttheorembodyfont{\normalfont}
          303 \ifmks@sty@notes\else% only in slides
          304 \defbeamertemplate{theorem begin}{miko}
          305 {\inserttheoremheadfont\inserttheoremname\inserttheoremnumber
                \ifx\inserttheoremaddition\@empty\else\ (\inserttheoremaddition)\fi%
                \inserttheorempunctuation\inserttheorembodyfont\xspace}
           308 \defbeamertemplate{theorem end}{miko}{}
           and we set it as the default one.
           309 \setbeamertemplate{theorems} [miko]
           The following fixes an error I do not understand, this has something to do with
           beamer compatibility, which has similar definitions but only up to 1.
```

310 \expandafter\def\csname Parent2\endcsname{}

\renewenvironment{columns}[1][]{%

311 \fi% ifmks@sty@notes
312 \ifmks@sty@notes%

\par\noindent%

313

314

```
\begin{minipage}%
315
316
        \slidewidth\centering\leavevmode%
      }{%
317
        \end{minipage}\par\noindent%
318
     }%
319
      \newsavebox\columnbox%
320
      \renewenvironment<>{column}[2][]{%
321
322
        \begin{lrbox}{\columnbox}\begin{minipage}{#2}%
323
     }{%
        \verb|\end{minipage}\end{lrbox}\usebox\\columnbox%|
324
     }%
325
326 \fi\% ifmks@sty@notes
327 \ifmks@sty@noproblems%
      \verb|\newenvironment{problems}{}{} \\
328
329 \ensuremath{\mbox{\sc lse}\mbox{\sc w}}
330
     \excludecomment{problems}%
331 \fi%
332 \langle /package \rangle
```

Change History

v0.1		the frame environment in notes		
General	l: Initial Version 1	mode 1		
v0.2		numbered sectocframes 1		
sem	l: course notes back on inar	this is almost done $\dots \dots 1$ v1.0		
v0.3				
	l: changing to Jacobs logo . 1	General: adding \frameimage 1		
v0.4	li li d	v1.1		
	l: moving line-end-comment	General: moving MathHub support		
	sing the whole thing on	out to separate package 1		
_	mer 1	reinterpreting omgroup 1		
v0.5	mei	Removing the old title macros		
	l: eliminating	(use the regular ones instead) \cdot . 1		
	wocolumns, this is better	v1.2		
_	e by beamer.cls 1	General: changed to keyval		
v0.9	•	class/package options, allowed		
General	l: basic options handling for	arbitrary classes 1		
Refere				
[CR99]	the TEX distribution. The Co	n Rathz. The graphicxl package. Part of mprehensive T _E X Archive Network. 1999. rg/texlive/devsrc/Master/texmf-graphicx.pdf.		
[Koh18a]				
	Michael Kohlhase. MathHub Support for sT _E X. Tech. rep. 2018. URL: https://github.com/sLaTeX/sTeX/raw/master/sty/mathhub/mathhub.pdf.			
[Koh18b]	Michael Kohlhase. metakeys.sty: A generic framework for extensible Metadata in ETEX. Tech. rep. 2018. URL: https://github.com/sLaTeX/sTeX/raw/master/sty/metakeys/metakeys.pdf.			
[sTeX]	sTeX: A semantic Extension of TeX/LaTeX. URL: https://github.com/sLaTeX/sTeX (visited on 05/15/2015).			
[Tana]	Till Tantau. beamer - A LaTeX class for producing presentations and slides. URL: http://ctan.org/pkg/beamer (visited on 01/07/2014).			
[Tanb]		e Beamer Class. URL: http://ctan.org/mer/doc/beameruserguide.pdf.		