

# beamerouterthemetubs – beamer-Aussenschema für *tubslatex*\*

Enrico Jörns e dot joerns at tu minus bs dot de

30. November 2020

#### Zusammenfassung

Diese Datei stellt das outer-Theme für latex-beamer-Präsentationen im Corporate Design bereit.

## 1 Template-Einbindung

Farben Die Farben der palette primary werden genutzt, um die Titelleiste etc. darzustellen. Die Farben der palette secondary werden genutzt, um die Elemente der Titelseite darzustellen. Ist die Option colorheads gewählt, wird palette primary.bg auf 40% der Farbe palette secondary.bg gesetzt.

# 2 Implementierung

- 1 (\*outertheme)
- 2\ProvidesPackage{beamerouterthemetubs}[\tubslatexVersion\space TU Braunschweig (beamer) outer t

#### Lade benötigte Pakete

- 3 \RequirePackage{ifthen}
- 4 \RequirePackage{calc}
- 5 \RequirePackage{tubslogo}
- 6 \PassOptionsToPackage{ngerman}{babel}
- 7 \RequirePackage{babel}
- 8 \RequirePackage{tubsbeamersizes}

#### Horizontaler Abstand in running toc

<sup>\*</sup>This document corresponds to beamerouterthemetubs ?, dated ?.

```
9 \newdimen\beamer@tochorizontalspace
10 \beamer@tochorizontalspace=0.15em

Boolean-Variablen für Optionen

11 \newboolean{tubs@nopagenum}\setboolean{tubs@nopagenum}{false}
12 \newboolean{tubs@nodate}\setboolean{tubs@nodate}{false}
13 \newboolean{tubs@noauthor}\setboolean{tubs@noauthor}{false}
14 \newboolean{tubs@totalpages}\setboolean{tubs@totalpages}{false}
15 \newboolean{tocinheader}\setboolean{tocinheader}{false}
16 \newboolean{nosubsectionsinheader}\setboolean{nosubsectionsinheader}{false}
17 \newboolean{colorhead}\setboolean{colorhead}{false}
18 \newboolean{colorhead}\setboolean{colorhead}{false}
19 \newboolean{colorfoot}\setboolean{colorfoot}{false}
```

### 2.1 Optionen

```
'nopagenum'
                        20 \DeclareOptionBeamer{nopagenum}{\setboolean{tubs@nopagenum}{true}}
             'nodate'
                        21 \DeclareOptionBeamer{nodate}{\setboolean{tubs@nodate}{true}}
           'noauthor'
                        {\tt 22 \backslash DeclareOptionBeamer\{noauthor\}\{\backslash setboolean\{tubs@noauthor\}\{true\}\}}
        'totalpages'
                        23\DeclareOptionBeamer{totalpages}{\setboolean{tubs@totalpages}{true}}
       'tocinheader'
                        {\tt 24 \backslash DeclareOptionBeamer\{tocinheader\}\{setboolean\{tocinheader\}\{true\}\}}
   'tinytocinheader'
                        25 \DeclareOptionBeamer{tinytocinheader}{\setboolean{tocinheader}{true}}
'nosubsectionsintoc'
                        26 \DeclareOptionBeamer{nosubsectionsintoc}{%
                        27 \setboolean{nosubsectionsinheader}{true}%
                        28 }
                        29 \DeclareOptionBeamer{nosubsectionsinheader}{%
                        30 \setboolean{nosubsectionsinheader}{true}%
                        31 }
```

```
'nologoinfoot'
                 {\tt 32 \setminus Declare Option Beamer \{nologoin foot\} \{ \setminus set boolean \{nologoin foot\} \{ true \} \}}
     'widetoc'
                 33 \DeclareOptionBeamer{widetoc}{\beamer@tochorizontalspace=0.3em}
   'narrowtoc'
                 34 \DeclareOptionBeamer{narrowtoc}{\beamer@tochorizontalspace=0.em}
                 Kopf-/Fuß-Darstellung
   'colorhead'
                 35 \DeclareOptionBeamer{colorhead}{
                 36 \setbeamercolor{palette primary}{use=palette secondary,bg=palette secondary.bg!40}
                 37 }
                Darstellung des Kopf- bzw. Fußbereichs in Farbe.
   'colorfoot'
                 38 \DeclareOptionBeamer{colorfoot}{\setboolean{colorfoot}{true}}
                 Optionen verarbeiten
                 39 \ProcessOptionsBeamer\relax
                2.2 Implementierung
                 Only sections and subsections in toc
                 40 \setcounter{tocdepth}{2}% TODO: check
                 _{4^1} \verb|\newboolean{highlighttitle}\setboolean{highlighttitle}{false}
                 42 \newboolean{notitle}\setboolean{notitle}{false}
                 Textränder links/rechts
                 43\setbeamersize{text margin left=\beamer@leftmarginwidth}
                 44\setbeamersize{text margin right=\beamer@leftmarginwidth}
                 45 \reset@font% TODO
                 Präsentations-Modus
```

46 \modeentation>

```
48% \newcommand<>\source[1]{%
                      \gdef\insertsource{}
                49 % %
                     \only#2{\renewcommand<>\insertsource{#1}}%
               50 %
                     insertsource is: \insertsource
                51 %
                52 % }
               Titlepage-Farbzuordnung
                53\setbeamercolor{titlepage}{use={palette secondary}, parent=palette secondary}
                {\tt 54} \setminus {\tt setbeamercolor\{titlebarfirst\}\{use=\{titlepage\},\ parent=titlepage,\ bg=titlepage.bg!80\}}
                55\setbeamercolor{titlebarsecond}{use={titlepage}, parent=titlepage, bg=titlepage.bg!40}
                56 \ifthenelse{\boolean{colorfoot}}{%
                57 \setbeamercolor{titlebarlow}{use={titlepage}, parent=titlepage, bg=titlepage.bg!80}
                58 } {%
                   \setbeamercolor{titlebarlow}{parent=separation line}
                59
                60 }
               Head/Foot-Farbzuordnung
                61\setbeamercolor{titlehead}{parent=palette primary}
                62\setbeamercolor{titlelike}{parent=titlehead}
                63\setbeamercolor{section in head/foot}{parent=titlehead,fg=alerted text.fg}
                64\setbeamercolor{section in head/foot shaded}{parent=titlehead}
                65\setbeamercolor{subsection in head/foot}{parent=section in head/foot}
                66\setbeamercolor{subsection in head/foot shaded}{use=titlehead,parent=titlehead,fg=titlehead.fg!
                67\setbeamercolor{title in head/foot}{parent=palette tertiary}
                68\setbeamercolor{date in head/foot}{parent=title in head/foot}
                69\setbeamercolor{author in head/foot}{parent=title in head/foot}
                70\setbeamercolor{pagenum in head/foot}{parent=title in head/foot}
sidebar right Sidebar löschen
                71 \defbeamertemplate*{sidebar right}{tubs}{}
    headline Kopfzeile wird gesetzt, wenn 'tocinheader' gewählt wurde
                72 \ifthenelse{\boolean{tocinheader}}{%
                   \defbeamertemplate*{headline}{tubs}{%
                74 %
                       \usebeamerfont{frametitle}% TODO
                        \def\@headtemplate{titlelike}
                75 %
                     % toc-Text-Farben für highlighttitle ändern
                76
                     \ifthenelse{\boolean{highlighttitle}}{%
                77
                        \setbeamercolor*{section in head/foot}{parent=highlight}
                78
                        \setbeamercolor{palette tertiary}{fg=white}% TODO: use from another
                79
                80
               81
                      \begin{beamercolorbox}[dp=0mm, ht=0.45\beamer@headheight]{section in head/foot}%
                          \parbox[b][0.45\beamer@headheight-\depth-.05\beamer@headheight]{\textwidth}{%
                82
                          \ifthenelse{\boolean{tocinheader}}{%
                83
                84
                            {\usebeamerfont{section in head/foot}%
```

47% \newcommand<>\insertsource{null}

```
\ifthenelse{\boolean{nosubsectionsinheader}}{}{%
             87
                            \vspace*{-0.5mm}%
             88
                            \insertsubsectionnavigationhorizontal{\textwidth}%
             89
                                    {\hskip20pt plus1fill1}{\quad}%
             90
                         }}%
             91
                       }{}%
             92
                       \vfill%
             93
             94
                   \end{beamercolorbox}%
             95
                 }%
             96
             97 } {%
                 \defbeamertemplate*{headline}{tubs}{}%
             98
             99 }
frametitle Frame-Titel
            100 \defbeamertemplate*{frametitle}{tubs}{%
                 % Breite und hoehe berechnen
                 \setlength{\tubs@outer@tempwidtha}{\textwidth+2\beamer@leftmarginwidth}
                 \ifthenelse{\boolean{tocinheader}}{%
            103
                   \setlength{\tubs@outer@tempwidthb}{0.55\beamer@headheight}%
            104
                 } {%
            105
                   \setlength{\tubs@outer@tempwidthb}{\beamer@headheight}%
            106
                 }%
            107
                 \vskip-1.5pt% TODO: check why needed...
            108
                 \ifthenelse{\boolean{highlighttitle}}{%
            109
            110
                   \addtolength{\tubs@outer@tempwidthb}{0.5\beamer@headheight}%
            111
                   \begin{beamercolorbox}[%
                            wd=\tubs@outer@tempwidtha,%
            112
                            dp=0mm.\%
            113
                           ht=\tubs@outer@tempwidthb]{highlight}%
            114
            115
                     \vspace*{1em}\par%
                     \hspace*{\beamer@leftmarginwidth}\parbox{\tubs@outer@tempwidtha-2\beamer@leftmarginwidth}
            116
                     \vspace*{0.5em}%
            117
                   \end{beamercolorbox}%
            118
                 }{%
            119
                   \begin{beamercolorbox}[%
            120
                           wd=\tubs@outer@tempwidtha,%
            121
                            dp=0mm,\%
            122
                           ht=\tubs@outer@tempwidthb]{titlelike}%
            123
                       \hspace*{\beamer@leftmarginwidth}\parbox{\tubs@outer@tempwidtha-2\beamer@leftmarginwidt
            124
                       \vfill%
            125
                   \end{beamercolorbox}%
            126
            127
                 }
            128 }%
```

\insertsectionnavigationhorizontal{\textwidth}%

{\hskip20pt plus1filll}{\quad}%

85

86

section in head/foot

```
129 \defbeamertemplate*{section in head/foot}{tubs}{%
                                    \usebeamercolor[fg]{section in head/foot}%
                                    132 }
   section in head/foot shaded
                                133 \defbeamertemplate*{section in head/foot shaded}{tubs}{%
                                134 \usebeamercolor[fg]{section in head/foot shaded}%
                                    {\insertsectionhead}\hspace{\beamer@tochorizontalspace}%
                                136 }
       subsection in head/foot
                                137 \defbeamertemplate*{subsection in head/foot}{tubs}{%
                                    \usebeamercolor[fg]{subsection in head/foot}%
                                    {\insertsubsectionhead}\hspace{\beamer@tochorizontalspace}%
                                140 }
subsection in head/foot shaded
                                141 \defbeamertemplate*{subsection in head/foot shaded}{tubs}{%
                                \usebeamercolor[fg]{subsection in head/foot shaded}%
                                    {\insertsubsectionhead}\hspace{\beamer@tochorizontalspace}%
                                144 }
                                Lösche nicht benötigte Sidebar-Inhalte
            section in sidebar
     section in sidebar shaded
                                145 \defbeamertemplate*{section in sidebar}{tubs}{}
         subsection in sidebar
                                146 \defbeamertemplate*{section in sidebar shaded}{tubs}{}
  subsection in sidebar shaded
                                147 \defbeamertemplate*{subsection in sidebar}{tubs}{}
      subsubsection in sidebar
                                148 \defbeamertemplate*{subsection in sidebar shaded}{tubs}{}
subsubsection in sidebar shaded
                                149 \defbeamertemplate*{subsubsection in sidebar}{tubs}{}
                                150 \defbeamertemplate*{subsubsection in sidebar shaded}{tubs}{}
                                Breite tubslogo: 24.7mm
                      footline
                                151 \newlength{\tubs@outer@tempwidtha}% used for settowidth
                                _{152}\ensuremath{\tubs@outer@tempwidthb}\% used for settowidth
                                153 \defbeamertemplate*{footline}{tubs}{%
                                154 % Kommandos deklarieren
                                    \def\@footsepline{\rule[-0.1em]{0.09em}{1em}}\%
                                    % Trennwort zwischen Seitenzahl und Gesamtseitenzahl
                                156
                                    \def\pageof{%
```

```
\iflanguage{ngerman}{von}{of}%
 158
          }%
 159
          % Datum + Trennstrich einfügen, Optionen beachten
160
           \def\tubs@insertdate{%
 161
                \ifthenelse{\boolean{tubs@nodate}}{}{%
 162
                    \usebeamerfont{date in head/foot}%
 163
                    \usebeamercolor{date in head/foot}%
164
                    \textcolor{fg}{\insertdate}%
 165
               }%
166
          }%
 167
          % Trennstrich + Seite einfügen, Optionen beachten
 168
           \def\tubs@insertpage{%
169
                \ifthenelse{\boolean{tubs@nopagenum}}{}{}
 170
                    \usebeamerfont{page in head/foot}%
 171
                    \usebeamercolor{page in head/foot}%
 172
                    \ifthenelse{\boolean{tubs@totalpages}}{%
 173
                           \ensuremath{\mbox{``Qfootsepline ``textcolor{fg}{\pagename ``linsertframenumber ``pageof ``linserttotalframenumber ``linsertto
 174
                    }{%
 175
                            \@footsepline~\textcolor{fg}{\pagename~\insertframenumber}%
 176
                    }%
 177
               }%
 178
          }%
 179
          %
180
           \def\tubs@insertauthor{%
 181
                \ifthenelse{\boolean{tubs@noauthor}}{}{%
 182
                     \usebeamerfont{author in head/foot}%
 183
                     \usebeamercolor{author in head/foot}%
 184
                    \textcolor{fg}{\insertshortauthor}%
 185
               }%
186
          }%
 187
          %
188
189
           \newcommand\tubs@inserttitle[1][]{%
190
                \usebeamerfont{title in head/foot}%
 101
                \usebeamercolor[fg]{title in head/foot}%
192
                \insertshorttitle[###1]%
 193
               }%
 194
           }%
 195
           %% Additional space needed to increase the calculated height of the footline
196
           \vspace*{0.25cm}
197
          % TU-Logo und Sekundärlogo
108
           \begin{minipage}{\paperwidth}
199
                \logoheight=20.7pt% Höhe des Logos in Fußzeile
200
               %Linie zeichnen
201
                {\usebeamercolor[bg]{separation line}\rule{\paperwidth}{0.4pt}}%
202
203
               % Logo-Dimensionen (manuell)
                \newdimen\beamer@CDlogowidth%
204
                \newdimen\beamer@CDlogoheight%
205
                \newdimen\@footline@textwidth%
206
                \beamer@CDlogowidth=24.7mm%
207
```

```
\beamer@CDlogoheight=9.17mm%
208
209 %
         \hspace*{-\textwidth}\hspace{\beamer@CDlogowidth}\hspace{5pt}%
210 %
         \raisebox{3pt}{\parbox[b]{\textwidth-\beamer@CDlogowidth-5pt-\beamer@CDborderwidth}{\ragg
211 %
       % Wieder auf Zeilenanfang
212
       \hspace*{-\paperwidth}%
213
       % Siegelbandlogo
214
       \raisebox{-0.75\beamer@CDlogoheight}{%
215
         \tubslogoAbs{\beamer@CDlogowidth}%
216
       }%
217
       %
218
       \hspace*{5pt}% Abstand Logo<->Text
219
220
       \raisebox{-9pt}{% Abstand Linie/Text
221
      % Breite von Textbereich (abhängig von Option 'nologoinfoot') berechnen
2.2.2
         \setlength\@footline@textwidth{%
223
           \paperwidth-5pt-\beamer@CDlogowidth-\beamer@CDborderwidth}%
224
         \ifthenelse{\boolean{nologoinfoot}}{}{}
225
           \addtolength\@footline@textwidth{-3.5\logoheight}% Logo-Breite abziehen
226
         }%
227
228
         % Textbereich setzen
         \parbox[t][26pt]{\@footline@textwidth}{% Höhe und Breite Textbereich
220
           % Prüfe, ob Inhalt in einzelne Zeile passt
230
           \settowidth{\tubs@outer@tempwidtha}{%
231
             \tubs@insertdate\tubs@insertauthor~\@footsepline~\tubs@inserttitle\tubs@insertpage}%
232
           \ifthenelse{\lengthtest{\tubs@outer@tempwidtha<\@footline@textwidth}}{% passt...
233
             \strut\tubs@insertdate
234
             \ifthenelse{\boolean{tubs@nodate}}{}{~\@footsepline~}%
235
             \tubs@insertauthor%
236
             \ifthenelse{\boolean{tubs@noauthor}}{}{~\@footsepline~}%
237
             \tubs@inserttitle%
238
             \tubs@insertpage%
239
           }{% passt nicht...
240
             \strut\tubs@insertdate%
241
             \ifthenelse{\boolean{tubs@nodate}}{}{%
242
               \ifthenelse{\boolean{tubs@noauthor}}{}{%
243
                  (\@footsepline^)}%
244
             \tubs@insertauthor\tubs@insertpage\hfill\\%
245
             \tubs@inserttitle[width=\@footline@textwidth]%
246
           }%
247
         }%
248
       }%
249
250
       \hspace*{0.5\beamer@CDborderwidth}% Abstand Text<->Logo
251
252
       \raisebox{-\logoheight-4pt}{%
253
         \parbox[t]{3.5\logoheight}{%
254
           \vbox to\logoheight{%
255
             \vfill%
256
             % Logo einfügen, wenn nicht 'nologoinfoot'-Option gewählt wurde
257
```

```
\ifthenelse{\boolean{nologoinfoot}}{}{}
258
                \usebeamerfont{footlinelogo}%
259
                \raggedleft\insertlogo%
260
              }%
261
              \vfill%
262
           }%
263
         }%
264
       }%
265
     \end{minipage}
266
267 }
```

navigation symbols Ausblenden der Navigations-Symbolleiste

268 \setbeamertemplate{navigation symbols}{}

## 2.3 Zusätzliche frame-Optionen

```
'notitle'
```

```
269 \define@boolkey{beamerframe}{notitle}[true]{%
       \ifKV@beamerframe@notitle
270 %
         \setboolean{notitle}{true}
271 %
272 %
       \else
273 %
        \setboolean{notitle}{false}
274 %
       \fi
275 }
```

#### 'highlight'

```
276 \define@boolkey{beamerframe}{highlight}[true]{%
    \ifKV@beamerframe@highlight
277
278
       \setboolean{highlighttitle}{true}
    \else
279
       \setboolean{highlighttitle}{false}
280
    \fi
281
282 }
```

Setze Standardwerte für zusätzliche Keys.

283 \presetkeys{beamerframe}{notitle=false, highlight=false}{}

#### 2.3.1 Veraltete Umgebungs-Alternative

Umgebungen sind nicht weiter dokumentiert und sollten nicht verwendet werden. Sie sind nur aus Kompatibilitätsgründen erhalten.

284 \newenvironment{highlightframe}[1]{%

```
285 \begin{frame}[highlight]{#1}%
286 }{%
287  \end{frame}%
288 }

289 \newenvironment{notitleframe}[1]{%
290  \setboolean{notitle}{true}%
291  \begin{frame}{#1}%
292 }{%
293  \end{frame}%
294  \setboolean{notitle}{false}%
295 }

296 \mode
297 <all>
298 \/ outertheme\
```