# The tubsthesis class\*

## Philip Hönnecke p dot hoennecke at tu minus braunschweig dot de

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#### Abstract

Document class for writing a thesis.

## 1 Introduction

This class uses the tubsbook document class to create an interface for writing a bachelor, master or project thesis and their exposé as well as dissertations.

### 2 TODO

This section lists parts where changes are needed.

• Add tubsthesis@ prefix to internal macros/commands.

### 2.1 Enhancements

- Maybe the usage of proposal and expose should be standardized.
- Check whether the major commands needs renaming.

# 3 Implementation

 $1 \langle *head \rangle$ 

Identification

- ${\tt 2 \ \ \ \ \ \ \ } [1999/12/01]$
- 3 \ProvidesClass{tubsthesis}[\tubslatexVersion tubs thesis class]

Preliminary declarations

- 4 \LoadClass[%
- 5 a4paper, % DIN A4
- $_{\rm 6}$  twoside,  $\,$  % doublesided document

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

```
8 bcor=15mm,
                                            % extra space for book binding
                    9 bibliography=totoc,
                                            % bibliography gets unnumbered entry
                                            % corporate design font
                   10 nexus,
                                            % use "Versalziffern" instead of
                   11 lnum,
                                            % "Mediaevalziffern"
                   12
                   13 extramargin,
                                            % override corporate design margin
                                            % to give more space for one-column text
                   14
                   15]{%
                   16 tubsbook%
                   17 }
                      Packages
                   18 \RequirePackage{xkeyval}
                   19 \usepackage{csquotes}
                   20 \usepackage[backend=biber]{biblatex}
                   21 \PassOptionsToPackage{hyphens}{url}
                   22 \usepackage[hidelinks]{hyperref}
                   23 \usepackage{xparse} % for \NewDocumentCommand only
                   24 (/head)
                      Option section
                   25 (*option)
                          Class options
                   The option german sets the used language to german.
         'german'
                   26 \define@boolkev{%
                   27 tubsthesis.cls%
                   28 }[cls]{german}[true]{}
        'english'
                   The option english sets the used language to english. If both german and english
                   are set to true, the option used last will take effect.
                   29 \define@boolkey{%
                   30 tubsthesis.cls%
                   31 }[cls]{english}[true]{%
                          \setkeys{tubsthesis.cls}{german=false}
                   32
                   33 }
       'proposal'
                   The option proposal is used to write a proposal / exposé.
                   34 \define@boolkey{%
                   35 tubsthesis.cls%
                   36 }[cls]{proposal}[true]{}
'nolistoffigures'
                   The option nolistoffigures prevents the creation of a list of figures.
                   37 \define@boolkey{%
                   38 tubsthesis.cls%
                   39 }[cls]{nolistoffigures}[true]{}
                   The option nolistoftables prevents the creation of a list of tables.
'nolistoftables'
```

% use CMYK colors

7 cmyk,

```
40 \define@boolkey{%
              41 tubsthesis.cls%
              42 }[cls]{nolistoftables}[true]{}
             The option noabstract prevents the printing of an abstract.
'noabstract'
              43 \define@boolkey{%
              44 tubsthesis.cls%
              45 }[cls]{noabstract}[true]{}
              The option noappenxid stops the creation of the appendix.
'noappendix'
              46 \define@boolkey{%
              47 tubsthesis.cls%
              48 }[cls]{noappendix}[true]{}
    'nodate'
              The option nodate is used if no dates should be printed.
                 This has no effect for dissertations.
              49 \define@boolkey{%
              50 tubsthesis.cls%
              51 }[cls]{nodate}[true]{}
              The option thesistype sets the type of thesis that should be created. Possible
'thesistype'
              values are:
                 • bachelor - Corresponds to Bachelor's Thesis
                 • master - Corresponds to Master's Thesis
                  • project - Corresponds to Project Thesis
                  • dissertation - Corresponds to Dissertation
              52 \newcommand{\thesistype}{default}
              53 \newif\iftubsthesis@diss
              54 \tubsthesis@dissfalse
              55 \newif\iftubsthesis@customtype
              56 \tubsthesis@customtypefalse
              57 \DeclareOptionX{thesistype}{
                     \def\temp{#1}
              58
                     \def\bachelor{bachelor}
              59
                     \def\master{master}
              61
                     \def\project{project}
                     \def\diss{dissertation}
              62
                     \ifclsgerman % begin german
              63
                         \ifx\temp\bachelor
              64
                             \def\thesistype{Bachelorarbeit}
              65
```

\def\thesistype{Masterarbeit}

66

67

68 69 \else

\else

\ifx\temp\master

\ifx\temp\project

```
\def\thesistype{Projektarbeit}
71
 72
                     \else
 73
                         \ifx\temp\diss
                              \def\thesistype{Dissertation}
 74
                              \unless\ifclsproposal
 75
                                  \tubsthesis@disstrue
 76
                                   \subtitle{Research Proposal}
 77
                              \fi
 78
 79
                         \else
                              % unknown type
 80
 81
                              \def\thesistype{#1}
                              \tubsthesis@customtypetrue
 82
 83
                         \fi
                     \fi
 84
                 \fi
 85
            \fi
 86
        \verb|\else % end german / begin english|
 87
            \ifx\temp\bachelor
 88
                 \def\thesistype{Bachelor's Thesis}
 89
 90
            \else
91
                 \ifx\temp\master
                     \def\thesistype{Master's Thesis}
 92
 93
                     \ifx\temp\project
                         \def\thesistype{Project Thesis}
 95
                     \else
 96
                         \t \sum_{x \in \mathbb{Z}} diss
 97
                              \verb|\def| the sistype{Dissertation}|
98
                              \unless\ifclsproposal
99
                                  \tubsthesis@disstrue
100
                                   \subtitle{Research Proposal}
101
102
                              \fi
103
                         \else
104
                              % unknown type
105
                              \def\thesistype{#1}
106
                              \tubsthesis@customtypetrue
                         \fi
107
                     \fi
108
                \fi
109
            \fi
110
        \fi % end english
111
112 }
113 (/option)
114 (*execoption)
    Process options
115 \ExecuteOptionsX{
        german=false,
117
        nolistoffigures=false,
```

```
118
       nolistoftables=false,
       noabstract=false,
119
120
       noappendix=false,
121
       nodate=false,
       thesistype=bachelor}
122
123 \ProcessOptionsX*\relax
    Set the language
124 \ifclsgerman
       \usepackage[ngerman]{babel}
125
126 \else
127
       \iftubsthesis@diss % begin dissertation
128
            % german and english are required to display the titlepage correctly
            \usepackage[ngerman,english]{babel}
130
       \else % end dissertation / begin other
131
            \usepackage[english]{babel}
       \fi % end other
132
133 \fi
134\,\% datetime2 needs the babel package to be loaded before
135 \usepackage[useregional]{datetime2}
    Add packages depending on type
136 \ifclsproposal
137
       \usepackage{tabularx}
138 \fi
139 (/execoption)
140 \langle * command \rangle
```

### 3.2 Commands

### 3.2.1 Configuration commands

```
The command \thesisname{<name>} is used to set the authors name.
         'thesisname'
                      141 \newcommand{\name}{%}
                              \ClassWarningNoLine{tubsthesis}{%
                      142
                                  No name set.\MessageBreak
                      143
                      144
                                  Use \protect\thesisname\space to set it
                      145
                      146 }
                      147 \newcommand{\thesisname}[1]{%
                              \author{#1}
                      148
                      149
                              \renewcommand{\name}{#1}
                      150 }
                       The command \thesistypeoverwrite{<name>} is used to overwrite the thesis
'thesistypeoverwrite'
                       type (like 'Bachelorarbeit' with 'Studienarbeit').
                       151 \newcommand{\thesistypeoverwrite}[1]{%
                              \def\thesistype{#1}
                      153
                              \tubsthesis@customtypetrue
                      154 }
```

#### 'thesissupervisors' The command

\thesissupervisors{<supervisor1>}{<supervisor2>}{<supervisor3>} sets the supervisors of the thesis. The 2nd and 3rd supervisors can be left blank since it is possible to have only one.

This command has no effect for dissertations.

```
155 \newcommand{\thesissupervisors}[3]{%
156 \newcounter{SupervisorsCounter}
157 \def\temp{#1}\ifx\temp\empty
           \newcommand{\supervisorone}{}
158
159 \newcommand{\supervisoronesign}{}
160 \else
161 \newcommand{\supervisorone}{#1\\}
162 \newcommand{\supervisoronesign}{%
                         & \rule[-0.5ex]{\linewidth}{1pt}
           \newline\itshape(\signature)\\[5ex]
164
165 }
166 \stepcounter{SupervisorsCounter}
167 \fi
168
169 \left\{ 2\right\} \
170 \newcommand{\supervisortwo}{}
171 \newcommand{\supervisortwosign}{}
172 \else
173 \newcommand{\supervisortwo}{#2\\}
174 \newcommand{\supervisortwosign}{%
                         & \rule[-0.5ex]{\linewidth}{1pt}
176
           \newline\itshape(\signature)\\[5ex]
177 }
178 \stepcounter{SupervisorsCounter}
179 \fi
180
181 \def	emp{#3}\ifx	emp\empty
182 \newcommand{\supervisorthree}{}
183 \newcommand{\supervisorthreesign}{}
185 \newcommand{\supervisorthree}{#3\\}
186 \newcommand{\supervisorthreesign}{%
187
           #3
                         & \rule[-0.5ex]{\linewidth}{1pt}
188
           \newline\itshape(\signature)\\[5ex]
189 }
190 \stepcounter{SupervisorsCounter}
191 \fi
192
193 \ifnum\theSupervisorsCounter=1
194 \newcommand{\supervisorstring}{Supervisor:}
196 \newcommand{\supervisorstring}{Supervisors:}
197 \fi
198 }
```

'thesisprofessor' The command \thesisprofessor[<prof2>]{<prof>} sets the professor of the thesis. The prof2 value is only needed for dissertations.

```
199 \newcommand{\tubsthesis@professor}{%
200
       \ClassWarningNoLine{tubsthesis}{%
201
           No professor set.\MessageBreak
           Use \protect\thesisprofessor\space to set one
202
203
204 }
205 \newcommand{\tubsthesis@professortwo}{%
       \ClassWarningNoLine{tubsthesis}{%
206
207
           No second professor set.\MessageBreak
208
           Use \protect\thesisprofessor\space to set one
209
210 }
211 \newcommand{\thesisprofessor}[2][]{%
       \renewcommand{\tubsthesis@professor}{#2}
212
       \left\{ \left( \#1 \right) \right\} 
213
            % No second professor given
214
215
            \renewcommand{\tubsthesis@professortwo}{#1}
216
217
       }
218 }
```

'thesistitle' The command \thesistitle{<german title>}{<english title>} sets the english and german title of the thesis.

The extra title isn't used in the thesis and can therefore be left empty. In the proposal the additional title is displayed in the titlepage's table. If the extra title is left empty in the proposal the respective table entry will be completely removed.

```
219 \newcommand{\titleenglish}{%
        \ClassWarningNoLine{tubsthesis}{%
220
            No thesis title set.\MessageBreak
221
            Use \protect\thesistitle\space to set one
222
223
224 }
225 \newcommand{\titlegerman}{%
226
        \ClassWarningNoLine{tubsthesis}{%
227
            No thesis title set.\MessageBreak
228
            Use \protect\thesistitle\space to set one
^{229}
230 }
231 \newif\ifextratitle\extratitlefalse
232 \newcommand{\thesistitle}[2]{\%
        \ifclsgerman % begin german
233
            \title{#1}
234
235
            \left( \frac{42}{2} \right)
        \else % end german / begin english
236
            \tilde{\#2}
237
            \left( \frac{1}{temp} \right)
238
239
        \fi % end english
```

```
240 \unless\ifx\temp\empty
241 \extratitletrue
242 \fi
243 \renewcommand{\titlegerman}{#1}
244 \renewcommand{\titleenglish}{#2}
245 }
```

'thesisbegindate'

The command \thesisbegindate{<yyyy>-<mm>-<dd>} sets the date the thesis began.

For dissertations this command has no effect.

 $\verb"`thesisend date",$ 

The command \thesisenddate{<yyyy>-<mm>-<dd>} sets the date when the thesis is handed in.

For dissertations this command will set the date when the dissertation was submitted. This date will also be printed on the titlepage.

```
250 \newcommand{\tubsthesis@date}{%
251 \DTMifsaveddate{tubsthesis@date}{%
252 \DTMusedate{tubsthesis@date}
253 \}{%
254 \DTMtoday
255 \}
256 \}
257 \newcommand{\thesisenddate}[1]{%
258 \DTMsavedate{tubsthesis@date}{#1}
259 \}
```

'thesisinstitute'

The command \thesisinstituteme>] {<name>} sets the institute's name.

```
260 \newcommand{\institute}{%
261 \ClassWarningNoLine{tubsthesis}{%
262     No institute name set.\MessageBreak
263     Use \protect\thesisinstitute\space to set it
264    }
265 }
266 \newcommand{\thesisinstitute}[1]{%
267     \renewcommand{\institute}{#1}
268 }
```

'thesisabstract'

The command \thesisabstract[<extra language>] {<used language>} sets the abstract in the english and german language. The <used language> value will set the abstract in the main language. The <extra language> value can be used to also set the abstract in the other language.

So if the thesis is written in german <used language> corresponds to german an <extra language> corresponds to english.

269 \newif\ifextraabstract\extraabstractfalse

```
\ClassWarningNoLine{tubsthesis}{%
                              No abstract set.\MessageBreak
                  272
                  273
                              Use \protect\thesisabstract\space to set one
                          }
                  274
                  275 }
                  276 % xparse (NewDocumentCommand) is used here to avoid errors when using other
                  277\,\% macros with optional arguments inside of the german abstract.
                  278 \NewDocumentCommand{\thesisabstract}{ O{} m }{%
                          \def\temp{#1}
                  279
                  280
                          \unless\ifx\temp\empty % begin extra abstract set
                              \extraabstracttrue
                  281
                              \newcommand{\extraabstract}{#1}
                  282
                          \fi % end extra abstract set
                  283
                  284
                          \renewcommand{\mainabstract}{#2}
                  285 }
                   The command \thesisposttitle{<content>} will define content that is printed
'thesisposttitle'
                   directly after the title page(s). To start on a new page, you have to use something
                   like clearpage.
                  286 \newcommand{\tubsthesis@posttitlecontent}{}
                  287 \newcommand{\thesisposttitle}[1]{%
                  288
                          \renewcommand{\tubsthesis@posttitlecontent}{#1}
                  289 }
                   Proposal only The following configurations are only used when proposal=true
                   is set.
                   The command \thesismatrikel{<id>} is used to set the authors identification
'thesismatrikel'
                   number (Matrikelnummer).
                  290 \newcommand{\matrikelnummer}{%
                  291
                          \ClassWarningNoLine{tubsthesis}{%
                              No identification number (Matrikelnummer) set.\MessageBreak
                  292
                  293
                              Use \protect\thesismatrikel\space to set it
                  294
                  295 }
                  296 \newcommand{\thesismatrikel}[1]{%
                          \renewcommand{\matrikelnummer}{#1}
                  297
                  298 }
                  The command \thesisemail{<mail>} is used to set the authors email address.
    'thesisemail'
                  299 \newcommand{\mail}{%
                  300
                          \ClassWarningNoLine{tubsthesis}{%
                  301
                              No email address set.\MessageBreak
                              Use \protect\thesisemail\space to set it
                  302
                  303
                  304 }
                  305 \mbox{ }\mbox{hewcommand{\thesisemail}[1]{}}
```

270 \newcommand{\mainabstract}{%

```
306
                                   \renewcommand{\mail}{#1}
                            307 }
                            The command \thesismajor{<major>} is used to set the authors major (Studi-
             'thesismajor'
                             engang).
                            308 \newcommand{\studysubject}{%
                            309
                                   \ClassWarningNoLine{tubsthesis}{%
                            310
                                       No thesis major set.\MessageBreak
                            311
                                       Use \protect\thesismajor\space to set it
                            312
                                   }
                            313 }
                            314 \newcommand{\thesismajor}[1]{%
                                   \renewcommand{\studysubject}{#1}
                            315
                                   % TODO: Maybe change this too (to major)
                            316
                            317 }
          'thesisduration'
                            The command \thesisduration{<dur>} is used to set the duration of the thesis.
                             For bachelor thesis this is 3 or 4 months. For master thesis this is 6 months.
                            318 \newcommand{\duration}{%
                                   \ClassWarningNoLine{tubsthesis}{%
                            319
                                       No thesis duration set.\MessageBreak
                            320
                                       Use \protect\thesisduration\space to set it
                            321
                            322
                            323 }
                            324 \newcommand{\thesisduration}[1]{%
                                   \renewcommand{\duration}{#1}
                            326 }
                             The command \thesispresentationpoints>]{<value>} sets the amount of
'thesispresentationpoints'
                             points from the presentation. This value will be displayed in the proposal's front
                             page table. If this command isn't used the according row won't be printed.
                            327 \newif\iftubsthesis@presentationpoints
                            328 \tubsthesis@presentationpointsfalse
                            329 \newcommand{\presentationpoints}{}
                            330 \newcommand{\thesispresentationpoints}[1]{\%
                                   \tubsthesis@presentationpointstrue
                            332
                                   \renewcommand{\presentationpoints}{#1}
                            333 }
                             Dissertation only The following configurations are only used when thesistype=dissertation
                             is set.
        'thesisfinalprint'
                            The command \thesisfinalprint is used to activate final print features.
                            334 \newif\iftubsthesis@finalprint
                            335 \tubsthesis@finalprintfalse
                            336 \newcommand{\thesisfinalprint}{%
                                   \tubsthesis@finalprinttrue
                            338 }
```

```
date of the author.
                        339 \DTMsavedate{tubsthesis@birthdate}{2500-12-20}
                        340 \newcommand{\thesisbirthdate}[1]{%
                        341
                               \DTMsavedate{tubsthesis@birthdate}{#1}
                        342 }
     'thesisbirthplace'
                         The command \thesisbirthplace{<birthplace>} is used to set the birthplace
                         of the author.
                        343 \newcommand{\tubsthesis@birthplace}{%
                                \ClassWarningNoLine{tubsthesis}{%
                        344
                                    No birthplace was set.\MessageBreak
                        345
                                    Use \protect\thesisbirthplace\space to set one
                        346
                        347
                        348 }
                        349 \newcommand{\thesisbirthplace}[1]{%
                                \renewcommand{\tubsthesis@birthplace}{#1}
                        350
                        351 }
                         The command \thesisdisputationdate{<yyy>-<mm>-<dd>} is used to set the
'thesisdisputationdate'
                         disputation date for the dissertation.
                        352 \DTMsavedate{tubsthesis@disputationdate}{2020-01-05}
                        353 \newcommand{\thesisdisputationdate}[1]{\%
                        354
                               \DTMsavedate{tubsthesis@disputationdate}{#1}
                        355 }
        'thesisfaculty'
                         The command \thesisfaculty \{ \faculty \} is used to set the faculty for writing
                         a dissertation.
                        356 \newcommand{\tubsthesis@faculty}{%
                        357
                                \ClassWarningNoLine{tubsthesis}{%
                                    No faculty was set.\MessageBreak
                        358
                                    Use \protect\thesisfaculty\space to set one
                        359
                               }
                        360
                        361 }
                        362 \newcommand{\thesisfaculty}[1]{%
                                \renewcommand{\tubsthesis@faculty}{#1}
                        363
                        364 }
                         The command \thesisdegree[<article>] {<degree>} is used to set the aca-
         'thesisdegree'
                         demic degree and it's article.
                            Example: \thesisdegree[einer]{Doktoringenieurin (Dr.-Ing)}
                         will produce the text: "[...] Erlangung des Grades einer Doktoringenieurin
                         (Dr.-Ing.)"
                        365 \newcommand{\tubsthesis@degree}{%
                                \ClassWarningNoLine{tubsthesis}{%
                        366
                                    No degree was set.\MessageBreak
                        367
                                    Use \protect\thesisdegree\space to set one
                        368
```

'thesisbirthdate'

The command \thesisbirthdate{<yyyy>-<mm>-<dd>} is used to set the birth-

```
369
                        370 }
                        371 \newcommand{\tubsthesis@degreearticle}{eines}
                        372 \newcommand{\thesisdegree}[2][]{%
                                \renewcommand{\tubsthesis@degree}{#2}
                                \ifthenelse{\equal{#1}{}}{\renewcommand{\tubsthesis@degreearticle}{#1}}
                        374
                        375 }
                         The command \thesisprintyear{<year>} is used to overwrite the print year of
      'thesisprintyear'
                         the dissertation. This is set to the year of \thesisdisputationdate by default.
                        376 \newcommand{\tubsthesis@printyear}{%
                                \DTMfetchyear{tubsthesis@disputationdate}
                        377
                        378 }
                        379 \newcommand{\thesisprintyear}[1]{%
                                \renewcommand{\tubsthesis@printyear}{#1}
                        380
                        381 }
                         3.2.2
                                Internal macros
                        The command \signature will return a german or english text for signing.
                        382 \ifclsgerman
                        383
                                \newcommand{\signature}{Datum, Unterschrift}
                        384 \else
                        385
                                \newcommand{\signature}{Date, Signature}
                        386 \fi
                         The length tubsthesis@tablewidth sets the width of proposal's title page table.
'tubsthesis@tablewidth'
                         This might have to be changed when one of the displayed values is longer than
                         expected.
                        387 \newlength\tubsthesis@tablewidth
                        388 \setlength\tubsthesis@tablewidth{.7\textwidth}
                        389 (/command)
                        390 (*environment)
                         3.3
                                Environments
               'thesis'
                         The environment thesis should contain all the thesis' content.
                        391 \newenvironment{thesis}{%
                        392
                        393 \ifclsproposal % begin proposal
                                % chapter command overwrite
                        394
                                % to avoid cleardoublepage before new chapters
                        395
                                \ifthenelse{\isundefined{\RedeclareSectionCommand}}{%
                        396
                        397
                                }{%
                                    \RedeclareSectionCommand[style=section,indent=0pt]{chapter}
```

400 \fi % end proposal

```
401
402 % Subject / subtitle
403 \ifclsproposal % begin proposal
        \ifclsgerman % begin german
            \iftubsthesis@customtype % begin custom type (overwritten)
405
406
                \subtitle{\thesistype}
            \else % end custom type (overwritten) / begin not overwritten
407
                \subtitle{Exposé zur \thesistype}
408
            \fi % end no overwritten type
409
       \else % end german / begin english
410
            \iftubsthesis@customtype % begin custom type (overwritten)
411
412
                 \subtitle{\thesistype}
413
            \else % end custom type (overwritten) / begin not overwritten
414
                 \subtitle{\thesistype~Proposal}
            \fi % end no overwritten type
415
       \fi % end english
416
417\,\text{\ensuremath{\mbox{\sc 4}17}} else % end proposal / begin thesis
       \subject{\thesistype}
418
419 \fi % end thesis
420
421 % Logo
422 \logo{\left\langle institute \right\rangle}
424 % Publisher (only for thesis)
425 \unless\ifclsproposal % begin thesis
        \unless\iftubsthesis@diss % begin not diss thesis
426
            \ifclsgerman % begin german
427
                \publishers{
428
                     \textbf{\institute\\
429
                     \tubsthesis@professor}\\
430
                     \vspace*{2em}
431
432
                     Betreuer:\\
433
                     \supervisorone
434
                     \supervisortwo
435
                     \supervisorthree
                }
436
            \else % end german / begin english
437
                \publishers{
438
                     \textbf{\institute\\
439
                     \tubsthesis@professor}\\
440
                     \vspace*{2em}
441
                     \supervisorstring\\
442
443
                     \supervisorone
444
                     \supervisortwo
445
                     \supervisorthree
446
447
            \fi % end english
448
       \fi % end not diss thesis
449 \fi % end thesis
450
```

```
451 % Date and frontmatter
452 \ifclsproposal % begin proposal
        \ifclsnodate % begin nodate
454
            \date{}
        \else % end nodate / begin date
455
            \date{\DTMusedate{tubsthesis@begindate}}
456
        \fi % end date
457
458\,\text{\ensuremath{\mbox{\sc 4}58}} else % end proposal / begin thesis
       \ifclsnodate % begin nodate
459
            \date{}
460
        \else % end nodate / begin date
461
            \date{\tubsthesis@date}
462
463
        \fi % end date
        \frontmatter % roman page numbering
465 \fi % end thesis
466
467\ \text{\%} Title
468 \ifclsproposal
469
470
            \let\newpage\relax
            \maketitle[plain,logo=left]
471
472
473 \else % end proposal / begin thesis
        \iftubsthesis@diss % begin dissertation
475
            \pagestyle{empty}
            \pagenumbering{roman}
476
477
            \maketitle[image,logo=left]
478
479
        \else % end dissertation / begin not diss thesis
480
            \maketitle
481
        \fi % end not diss thesis
482
483 \fi % end thesis
484
486 \ifclsproposal % begin proposal
488 \% Table with infos
489 \begin{table}[h]
        \centering
490
        \begin{tabularx}{\tubsthesis@tablewidth}{XX}
491
492
            \hline
            \ifclsgerman % begin german
493
                \ifextratitle
494
                     Englischer Titel& \titleenglish
                                                                 \\\hline
495
496
                \fi
                                      & \DTMusedate{tubsthesis@begindate} \\hline
497
                Anmeldedatum
498
                Matrikelnummer
                                      & \matrikelnummer
                                                                \\\hline
                                      & \mail
                                                                 \\\hline
499
                E-Mail
                                      & \studysubject
                Studiengang
                                                                 //
500
```

```
\else % end german / begin english
501
               \ifextratitle
502
                    German title
                                    & \titlegerman
                                                             \\\hline
503
504
               \fi
                                    & \DTMusedate{tubsthesis@begindate} \\\hline
505
               Registration date
506
               Registration number & \matrikelnummer
                                                             \\\hline
                                                             \\\hline
507
               E-Mail
                                    & \mail
               Subject
                                    & \studysubject
                                                             11
508
           \fi % end english
509
       \end{tabularx}
510
511 \end{table}
512
513 \iftubsthesis@presentationpoints % begin presentation points
       \begin{center}
514
515
           \ifclsgerman % begin german
               \textlnum{Der Abschlussvortrag geht mit \presentationpoints~Credits in die Absch
516
           \else % end german / begin english
517
               \textlnum{The presentation contributes \presentationpoints~credit points to the
518
           \fi % end english
519
       \end{center}
520
521 \fi % end presentation points
522
523 \else % end proposal / begin thesis
524
525 \cleardoublepage
526
527 \leftarrow 327  begin dissertation
       \begin{otherlanguage}{ngerman} % begin printing in german for dates
528
       \begin{center}
529
           \ifclsgerman % begin german
530
               {\large \titlegerman}
531
           \else % end german / begin english
532
               {\large \titleenglish}
533
534
           \fi % end english
535
536
           \vspace{1cm}
537
           \ifthenelse{\boolean{tubsthesis@finalprint}}{Von der}{Der}\linebreak
538
           \tubsthesis@faculty \linebreak
539
           der Technischen Universität Carolo-Wilhelmina zu Braunschweig \linebreak
540
541
           \vspace{.5cm}
542
543
           zur Erlangung des Grades \tubsthesis@degreearticle\linebreak
544
           \textbf{\tubsthesis@degree}\linebreak
545
546
547
           \vspace{.5cm}
548
           \ifthenelse{\boolean{tubsthesis@finalprint}}{genehmigte}{vorgelegte}
549
           Dissertation\linebreak
550
```

```
551
           \vspace{.5cm}
552
553
554
           von\linebreak
           \name\linebreak
555
           geboren am \DTMusedate{tubsthesis@birthdate}\linebreak
556
           in \tubsthesis@birthplace\linebreak
557
       \end{center}
558
559
       \vspace{4cm}
560
561
       \begin{tabular}{p{5cm} 1}
562
           Eingereicht am: & \tubsthesis@date \\
563
           Disputation am: & \DTMusedate{tubsthesis@disputationdate} \\
564
565
           1. Referent: & \tubsthesis@professor \\
           2. Referent: & \tubsthesis@professortwo \\
566
       \end{tabular}
567
568
       \vspace{1cm}
569
570
       \begin{center}
571
           \tubsthesis@printyear
572
       \end{center}
573
574
       \end{otherlanguage} % end german printing
575
576
       \pagestyle{headings}
577
578
       \tubsthesis@posttitlecontent
579
580 \ensuremath{\,{}^{igcup}} end dissertation / begin not diss thesis
       \tubsthesis@posttitlecontent
581
582
583
       % statement of originality
       \thispagestyle{plain} % no header
       \vspace*{7cm}
       \ifclsgerman % begin german
586
            \centerline{\bfseries Eidesstattliche Erklärung}
587
588
           \vspace*{1em}
           \noindent
589
           Ich erkläre hiermit an Eides statt, dass ich die vorliegende
590
           \thesistype~selbstständig
591
           verfasst sowie alle benutzten Quellen und Hilfsmittel
592
           vollständig angegeben habe und dass die Arbeit
593
           nicht bereits als Prüfungsarbeit vorgelegen hat.
594
595
596
597
            \bigskip\noindent Braunschweig, den \tubsthesis@date \par
598
       \else % end german / begin english
599
           \centerline{\bfseries Statement of Originality}
           \vspace*{1em}
600
```

```
601
           \noindent
           This thesis has been performed independently with the
602
603
           support of my supervisor/s.
604
           To the best of the author's knowledge,
           this thesis contains no material previously
605
           published or written by another person except where
606
           due reference is made in the text.
607
608
609
            \par
            \bigskip\noindent Braunschweig, \tubsthesis@date \par
610
611
       \fi % end english
       \vspace*{10mm}
612
613
       \hfill\hrulefill
614 \fi % end not diss thesis
615 \cleardoublepage
616
617 % abstract
618 \unless\ifclsnoabstract % begin abstract
       \thispagestyle{plain} % no header
619
620
       \ifclsgerman % begin german
           \centerline{\bfseries Zusammenfassung}
621
           \vspace*{1em}
622
           \noindent
623
624
           \mainabstract
625
           \ifextraabstract % begin extra abstract
626
                \vspace*{5em}
627
628
                \centerline{\bfseries Abstract}
629
                \vspace*{1em}
630
                \noindent
631
632
                \extraabstract
633
           \fi % end extra abstract
634
       \else % end german / begin english
635
            \centerline{\bfseries Abstract}
636
            \vspace*{1em}
           \noindent
637
           \mainabstract
638
639
           \% If german abstract was given
640
           \ifextraabstract % begin extra abstract
641
642
                \vspace*{5em}
643
                \centerline{\bfseries Zusammenfassung}
644
645
                \vspace*{1em}
646
                \noindent
647
                \extraabstract
648
           \fi % end extra abstract
       \fi % end english
649
       \cleardoublepage
650
```

```
651 \fi % end abstract
653 \tableofcontents
654 \cleardoublepage
655
656 \unless\ifclsnolistoffigures % begin listoffigures
                 \listoffigures
657
                 \cleardoublepage
658
659 \fi % end listoffigures
660
661 \noindent 
                 \listoftables
662
                 \cleardoublepage
664 \fi % end listoftables
665
666 \mainmatter
667
668 \fi % end thesis
669 }{%
670 \ifclsproposal % begin proposal
671 \noindent
672 \newpage
673 \ifclsgerman % begin german
                 \chapter{Durchführung und Bearbeitung}
675
                 Dieses Dokument stellt die Grundlage zur Bearbeitung
676
                 der \thesistype~dar und beschreibt
677
                 die vorgesehenen Inhalte und Ziele.
                 Alle Hinweise und Vorschriften des betreuenden Instituts,
678
                 der Fakultät und der TU Braunschweig werden beachtet.
679
680 Die Laufzeit beträgt \duration~Monate.
681 \vspace*{10mm}
682 \paragraph{Aufgabenstellung und Betreuung}\hfill\\[3ex]
683 \noindent
684 \begin{tabularx}{\textwidth}{@{}XX}
685 \supervisoronesign
686 \supervisortwosign
687 \supervisorthreesign
                                                                                & \rule[-0.5ex]{\linewidth}{1pt}\newline\itshape(\signature)
688 \tubsthesis@professor
689 \end{tabularx}
690 \vspace*{10mm}
691 \paragraph{Bearbeitung}\hfill\\[3ex]
692 \noindent
693 \begin{tabularx}{\textwidth}{@{}XX}
                                   & \rule[-0.5ex]{\linewidth}{1pt}\newline\itshape(\signature)
694 \name
695 \end{tabularx}
696 \else % end german / begin english
697
                 \chapter{Execution and Editing}
698
                 This document is the foundation for the \thesistype~and
699
                 explains the designated contents and goals.
                 All instructions and regulations of the supervising institute,
700
```

```
the faculty and the TU Braunschweig are observed.
702 The duration of the thesis is \operatorname{duration\@ifnextcolor{^{\circ}}} months.
703 \paragraph{Task Definition and Supervision}\hfill\\[3ex]
704 \noindent
705 \begin{tabularx}{\textwidth}{@{}XX}
706 \supervisoronesign
707 \supervisortwosign
708 \supervisorthreesign
                                       & \cline{-0.5ex}{\linewidth}{1pt}\newline\there(\signature)
709 \text{ } \text{tubsthesis@professor}
710 \end{tabularx}
711 \vspace*{10mm}
712 \paragraph{Task Execution}\hfill\\[3ex]
713 \noindent
714 \begin{tabularx}{\textwidth}{@{}XX}
                 & \rule[-0.5ex]{\linewidth}{1pt}\newline\itshape(\signature)
715 \name
716 \end{tabularx}
717 \fi % end english
718 \newpage
719\ % end proposal
720
721 \printbibliography
723 \unless\ifclsproposal % begin thesis
724
        \unless\ifclsnoappendix % begin appendix
725
726
            \appendix
        \fi % end appendix
727
728 \fi % end thesis
729 }
730 \langle /environment \rangle
731 \langle *body \rangle
732 \langle \mathsf{/body} \rangle
```