

# The ebsthesis document class for use with L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>\*

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## Abstract

The `ebsthesis` class facilitates the production of camera-ready manuscripts in conformance with the guidelines of Gabler Verlag and typographical rules established by European Business School.

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## 1 User Documentation

This final release is incompatible with earlier versions. I apologize for not providing decent documentation.

## 2 Code

```
1 \(*ebsthesis)
2 \NeedsTeXFormat{LaTeX2e}[2003/12/01]
3 \ProvidesClass{ebsthesis}%
4     [2006/12/31 v1.0 EBS Thesis Class (PNB)]
5 \newif\if@gabler
6 \DeclareOption{gabler}{\@gablertrue}
7 \DeclareOption{grundregeln}{\@gablerfalse}
8 \newif\if@singlespacing
9 \DeclareOption{singlespacing}{\@singlespacingtrue}
```

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\*This file has version number v1.0, last revised 2006/12/31. I am grateful for helpful comments I received from André Kudra and others.

```

10 \DeclareOption{onehalfspacing}{\@singlespacingfalse}
11 \newif\if@headrules
12 \DeclareOption{headrules}{\@headrulestrue}
13 \DeclareOption{noheadrules}{\@headrulesfalse}
14 \newif\if@tools
15 \DeclareOption{tools}{\@toolstrue}
16 \DeclareOption{notools}{\@toolsfalse}
17 \newif\if@fancyfoot
18 \DeclareOption{fancyfoot}{\@fancyfoottrue}
19 \DeclareOption{nofancyfoot}{\@fancyfootfalse}
20 \newif\if@indentcaptions
21 \DeclareOption{indentcaptions}{\@indentcaptionstrue}
22 \DeclareOption{noindentcaptions}{\@indentcaptionsfalse}
23 \newif\if@mathematica
24 \DeclareOption{mathematica}{\@mathematicatrue}
25 \DeclareOption{nomathematica}{\@mathematicafalse}
26 \DeclareOption{8pt}{\@OptionNotUsed}
27 \DeclareOption{9pt}{\@OptionNotUsed}
28 \DeclareOption{10pt}{\@OptionNotUsed}
29 \DeclareOption{11pt}{\@OptionNotUsed}
30 \DeclareOption{12pt}{\@OptionNotUsed}
31 \DeclareOption{14pt}{\@OptionNotUsed}
32 \DeclareOption{17pt}{\@OptionNotUsed}
33 \DeclareOption{20pt}{\@OptionNotUsed}
34 \DeclareOption{oneside}{\@OptionNotUsed}
35 \DeclareOption{twoside}{\@OptionNotUsed}
36 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{extbook}}
37 \ExecuteOptions{%
38   grundregeln,%
39   onehalfspacing,%
40   noheadrules,%
41   notools,%
42   nofancyfoot,%
43   noindentcaptions,%
44   nomathematica%
45 }
46 \ProcessOptions\relax
47 \if@gabler
48   \PassOptionsToClass{a5paper,9pt,twoside}{extbook}
49 \else
50   \PassOptionsToClass{a4paper,12pt,oneside}{extbook}
51 \fi
52 \LoadClass{extbook}[1999/01/07]
53 % Modified generic headings and names
54 \renewcommand{\contentsname}{Table of Contents}
55 \renewcommand{\figurename}{Fig.}
56 \renewcommand{\tablename}{Table}
57 % New generic headings and names
58 \newcommand{\abkuerzungsverzeichnisname}{List of Abbreviations}
59 \newcommand{\appendicesname}{Appendices}

```

```

60 \newcommand{\geleitwortname}{Foreword}
61 \newcommand{\inhaltsuebersichtname}{Summary of Contents}
62 \newcommand{\listappendixname}{List of Appendices}
63 \newcommand{\symbolverzeichnisname}{List of Symbols}
64 \newcommand{\vorwortname}{Preface}
65 % Babel support
66 \AtBeginDocument{%
67   \ifpackageloaded{babel}{%
68     \addto{\captionsenglish}{%
69       \renewcommand{\contentsname}{Table of Contents}%
70       \renewcommand{\figurename}{Fig.}%
71       \renewcommand{\tablename}{Table}%
72     }%
73     \addto{\extrasenglish}{%
74       \renewcommand{\abkuerzungsverzeichnisname}{List of Abbreviations}%
75       \renewcommand{\appendicesname}{Appendices}%
76       \renewcommand{\geleitwortname}{Foreword}%
77       \renewcommand{\inhaltsuebersichtname}{Summary of Contents}%
78       \renewcommand{\listappendixname}{List of Appendices}%
79       \renewcommand{\symbolverzeichnisname}{List of Symbols}%
80       \renewcommand{\vorwortname}{Preface}%
81     }%
82     \addto{\captionsngerman}{%
83       \renewcommand{\figurename}{Abb.}%
84       \renewcommand{\tablename}{Tab.}%
85     }%
86     \addto{\extrasngerman}{%
87       \renewcommand{\abkuerzungsverzeichnisname}{Abk\ "urzungsverzeichnis}%
88       \renewcommand{\appendicesname}{Anhang}%
89       \renewcommand{\geleitwortname}{Geleitwort}%
90       \renewcommand{\inhaltsuebersichtname}{Inhalts\ "ubersicht}%
91       \renewcommand{\listappendixname}{Verzeichnis des Anhangs}%
92       \renewcommand{\symbolverzeichnisname}{Symbolverzeichnis}%
93       \renewcommand{\vorwortname}{Vorwort}%
94     }%
95   }{\relax}%
96 }
97 % New paper format and margins
98 \RequirePackage{geometry}[2002/07/08]
99 \if@gabler
100 \geometry{%
101   totalwidth=11.5cm,%
102   totalheight=18cm,%
103   includeheadfoot,%
104   centering,%
105   mag=1414
106 }
107 \else
108 \geometry{%
109   left=4cm,%

```

```

110     right=2cm,%
111     top=3cm,%
112     bottom=2cm,%
113     headsep=1cm,%
114     footnotesep=\baselineskip
115 }
116 \fi
117 % New linespacing
118 \RequirePackage[nodisplayskipstretch]{setspace}[2000/12/01]
119 \if@gabler
120   \renewcommand{\singlespacing}{\setstretch{1.1}%
121     \vskip \baselineskip}
122   \renewcommand{\onehalfspacing}{\setstretch{1.3}%
123     \vskip \baselineskip}
124   \newcommand*{\absindent}{\relax}
125 \else
126   \renewcommand{\singlespacing}{\setstretch{1.0}%
127     \vskip \baselineskip}
128   \renewcommand{\onehalfspacing}{\setstretch{1.5}%
129     \vskip \baselineskip}
130   \newcommand*{\absindent}{\addvspace{\medskipamount}\noindent}
131 \fi
132 \if@singlespacing
133   \singlespacing
134 \else
135   \onehalfspacing
136 \fi
137 % New figures and tables
138 \RequirePackage{rotfloat}[2004/01/04]
139 \RequirePackage{caption}[2004/07/16]
140 \DeclareCaptionLabelSeparator{period-enspace}{.\enspace}
141 \DeclareCaptionLabelFormat{tight}{#1\,#2}
142 \captionsetup{%
143   margin=0.05\columnwidth,
144   font=small,
145   labelfont=bf,%
146   labelsep=period-enspace%
147 }
148 \captionsetup[figure]{%
149   labelformat=tight%
150 }
151 \captionsetup[table]{%
152   position=top%
153 }
154 \if@indentcaptions
155   \captionsetup{%
156     format=hang%
157   }
158 \fi
159 % New footnotes

```

```

160 \RequirePackage{ragged2e}[2003/03/25]
161 \RequirePackage{ragged,%
162         bottom,%
163         hang,%
164         splitrule,%
165         stable,%
166         multiple}{footmisc}[2004/05/02]
167 \renewcommand{\mpfootnoterule}{\relax}
168 \RequirePackage{remreset}
169 \@removefromreset{footnote}{chapter}
170 \if@fancyfoot
171   \long\def\@makefnmark#1{%
172     \bgroup
173       \setbox\@tempboxa\hbox{%
174         \ifdim\footnotemargin>0pt
175           \hb@xt@\footnotemargin{\rlap\normalfont%
176             \@thefnmark.\hss}%
177         \else
178           \rlap\normalfont\@thefnmark.
179         \fi
180       }%
181       \leftmargin\wd\@tempboxa
182       \rightmargin\z@
183       \linewidth \columnwidth
184       \advance \linewidth -\leftmargin
185       \parshape \@ne \leftmargin \linewidth
186       \footnotesize
187       \parskip\hangfootparskip\relax
188       \parindent\hangfootparindent\relax
189       \@setpar{\@@par}}%
190       \leavevmode
191       \llap{\box\@tempboxa}%
192       \footnotelayout#1%
193       \par\egroup%
194   }
195 \fi
196 % New headings
197 \RequirePackage[nobottomtitles*,
198         newparttoc,
199         cleareempty,
200         toctitles,
201         newlinetospace,
202         pagestyles]{titlesec}[2005/01/22]
203 \RequirePackage{calc}[1998/07/07]
204 \titleformat{\part}[display]{%
205   \thispagestyle{empty}\normalfont\huge\mdseries\singlespacing\filright}{%
206   \bfseries\partname~\thepart}{0pt}{%
207   \titlespacing*{\part}{%
208     Opt}{-\headheight-\headsep}{1.15ex plus .1ex}
209   \titleformat{\chapter}{%

```

```

210 \normalfont\LARGE\bfseries\singlespacing\filright}{%
211 \thechapter}{1em}{}
212 \titlespacing*{\chapter}{%
213 Opt}{-\headheight-\headsep}{1.15ex plus .1ex}
214 \titleformat{\section}{%
215 \normalfont\Large\bfseries\singlespacing\filright}{%
216 \thesection}{1em}{}
217 \titlespacing*{\section}{%
218 Opt}{1.75ex plus .5ex minus .1ex}{1.15ex plus .1ex}
219 \titleformat{\subsection}{%
220 \normalfont\large\bfseries\singlespacing\filright}{%
221 \thesubsection}{1em}{}
222 \titlespacing*{\subsection}{%
223 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
224 \titleformat{\subsubsection}{%
225 \normalfont\normalsize\bfseries\filright}{%
226 \thesubsubsection}{1em}{}
227 \titlespacing*{\subsubsection}{%
228 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
229 \titleformat{\paragraph}{%
230 \normalfont\normalsize\mdseries\itshape\filright}{%
231 \upshape\theparagraph}{1em}{}
232 \titlespacing*{\paragraph}{%
233 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
234 \titleformat{\subparagraph}{%
235 \normalfont\normalsize\mdseries\itshape\filright}{%
236 \upshape\thesubparagraph.}{1em}{}
237 \titlespacing*{\subparagraph}{%
238 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
239 \renewcommand{\thesubparagraph}{\alph{subparagraph}}
240 \titleclass{\subsubparagraph}{straight}[\subparagraph]
241 \newcounter{subsubparagraph}[subparagraph]
242 \renewcommand{\thesubsubparagraph}{\roman{subsubparagraph}}
243 \titleformat{\subsubparagraph}{%
244 \normalfont\normalsize\mdseries\filright}{%
245 \thesubsubparagraph.}{1em}{}
246 \titlespacing*{\subsubparagraph}{%
247 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
248 \setcounter{secnumdepth}{6}
249 % New headers and footers
250 \if@headrules
251 \newlength{\headrulewidth}
252 \setlength{\headrulewidth}{0.05em}
253 \fi
254 \renewpagestyle{plain}[\small]{%
255 \if@gabler
256 \sethead[] [] []%
257 {}-{}-{}
258 \setfoot[\usepage] [] []%
259 {}-{}-\usepage}

```

```

260 \else
261   \if@headrules
262     \headrule
263     \setheadrule{\headrulewidth}
264   \fi
265   \sethead[] [--\,\usepage\,--] []%
266     {}{--\,\usepage\,--}{
267   \setfoot[] [] []%
268     {}{}{}
269 \fi%
270 }
271 \newpagestyle{ebs}[\small]{%
272   \if@headrules
273     \headrule
274     \setheadrule{\headrulewidth}
275   \fi
276   \if@gabler
277     \sethead[\usepage] [] [\ifthechapter{\thechapter\quad}{\textit{\chaptertitle}}%
278       {\ifthesection{\thesection\quad}{\textit{\sectiontitle}}}{\usepage}
279   \else
280     \sethead[] [--\,\usepage\,--] []%
281       {}{--\,\usepage\,--}{
282   \fi
283   \setfoot[] [] []%
284     {}{}{}%
285 }
286 \pagestyle{ebs}
287 \RequirePackage{titletoc}[2005/01/22]
288 % New part TOC entry
289 \titlecontents{part}[0pt]{%
290   \addvspace{10pt}\filright}{%
291   \textbf{\partname\space\textsc{\MakeLowercase{\thecontentslabel}}:\enspace}}{}{}
292 \newlength{\digitlength}
293 \settowidth{\digitlength}{9.}
294 \newlength{\pnumwidth@roman}
295 \settowidth{\pnumwidth@roman}{XVIII}
296 \newlength{\pnumwidth@arabic}
297 \settowidth{\pnumwidth@arabic}{999}
298 \addtolength{\pnumwidth@arabic}{0.25em}
299 \contentsmargin{\pnumwidth@arabic}
300 \titlecontents{chapter}[2\digitlength]{\addvspace{5pt}\bfseries\contentsmargin{\pnumwidth@roman}
301 \dottedcontents{section}[5\digitlength]{}{3\digitlength}{0.75em}
302 \dottedcontents{subsection}[9\digitlength]{}{4\digitlength}{0.75em}
303 \dottedcontents{subsubsection}[14\digitlength]{}{5\digitlength}{0.75em}
304 \dottedcontents{paragraph}[20\digitlength]{}{6\digitlength}{0.75em}
305 \dottedcontents{subparagraph}[27\digitlength]{}{7\digitlength}{0.75em}
306 \dottedcontents{subsubparagraph}[35\digitlength]{}{8\digitlength}{0.75em}
307 % Appendix
308 \newcommand{\listofappendices}{%
309   \section*{\listappendixname\sectionmark{\listappendixname}}

```

```

310 \printcontents[appendix]{1}{1}{\setcounter{tocdepth}{4}}
311 \titlecontents{section}[2\digitlength]{\addvspace{5pt}\bfseries\contentsmargin{\pnumwidth@rom
312 \dottedcontents{subsection}[5\digitlength]{3\digitlength}{0.75em}
313 \dottedcontents{subsubsection}[9\digitlength]{4\digitlength}{0.75em}
314 \dottedcontents{paragraph}[14\digitlength]{5\digitlength}{0.75em}
315 \dottedcontents{subparagraph}[20\digitlength]{6\digitlength}{0.75em}
316 \dottedcontents{subsubparagraph}[27\digitlength]{7\digitlength}{0.75em}
317 }
318 \renewcommand{\appendix}{%
319 \ClassWarningNoLine{ebsthesis}{%
320 Use \noexpand\startappendices and \noexpand\stopappendices instead of \noexpand\appendix}
321 }
322 \newcommand{\startappendices}{%
323 \ttl@toclabelfalse
324 \ttl@setifthe{chapter}
325 \setcounter{chapter}{0}
326 \setcounter{section}{0}
327 \renewcommand{\chaptername}{\appendixname}
328 \renewcommand{\thesection}{\Alph{section}}
329 \numberwithin{equation}{section}
330 \numberwithin{figure}{section}
331 \numberwithin{table}{section}
332 \numberwithin{thm}{section}
333 \numberwithin{cor}{section}
334 \numberwithin{defn}{section}
335 \numberwithin{conj}{section}
336 \numberwithin{exmp}{section}
337 \chapter*{\appendicesname\chaptermark{\appendicesname}}
338 \addcontentsline{toc}{chapter}{\appendicesname}
339 \titleformat{\section}{%
340 \normalfont\large\bfseries}{%
341 \chaptertitlename~\thesection}{1em}{}
342 \titlespacing*{\section}{%
343 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
344 \titleformat{\subsection}{%
345 \normalfont\normalsize\bfseries}{%
346 \thesubsection}{1em}{}
347 \titlespacing*{\subsection}{%
348 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
349 \titleformat{\subsubsection}{%
350 \normalfont\normalsize\mdseries\itshape}{%
351 \upshape\thesubsubsection}{1em}{}
352 \titlespacing*{\subsubsection}{%
353 Opt}{1.625ex plus .5ex minus .1ex}{.75ex plus .1ex}
354 \stopcontents[main]%
355 \resumecontents[appendix]%
356 \stoplist[main]{lof}%
357 \resumelist[appendix]{lof}%
358 \stoplist[main]{lot}%
359 \resumelist[appendix]{lot}%

```

```

360 }
361 \newcommand{\stopappendices}{%
362   \stopcontents[appendix]%
363   \resumecontents[main]%
364 }
365 % New titlepage
366 \newcommand{\thegrad}{Doctor rerum politicarum}
367 \newcommand*{\grad}[1]{%
368   \renewcommand{\thegrad}{#1}}
369 \newcommand{\thetitel}{%
370   \ClassWarningNoLine{ebsthesis}{%
371     Kein \noexpand\titel angegeben}}
372 \newcommand*{\titel}[1]{%
373   \renewcommand{\thetitel}{#1}}
374 \newcommand{\theuntertitel}{%
375   \newcommand*{\untertitel}[1]{%
376     \renewcommand{\theuntertitel}{#1}}
377 \newcommand{\thefachbereich}{Betriebswirtschaftslehre}
378 \newcommand*{\fachbereich}[1]{%
379   \renewcommand{\thefachbereich}{#1}}
380 \newcommand{\thehochschule}{%
381   European Business School}
382 \newcommand*{\hochschule}[1]{%
383   \renewcommand{\thehochschule}{#1}}
384 \newcommand{\thekandidat}{%
385   \ClassWarningNoLine{ebsthesis}{%
386     Kein \noexpand\kandidat angegeben}}
387 \newcommand*{\kandidat}[1]{%
388   \renewcommand{\thekandidat}{#1}}
389 \renewcommand*{\author}[1]{%
390   \renewcommand{\thekandidat}{#1}}
391 \newcommand{\thegeburtsort}{%
392   \ClassWarningNoLine{ebsthesis}{%
393     Kein \noexpand\geburtsort angegeben}}
394 \newcommand*{\geburtsort}[1]{%
395   \renewcommand{\thegeburtsort}{#1}}
396 \newcommand{\thereferenten}{%
397   \ClassWarningNoLine{ebsthesis}{%
398     Keine \noexpand\referenten angegeben}}
399 \newcommand*{\referenten}[1]{%
400   \renewcommand{\thereferenten}{#1}}
401 \newcommand{\theeinreichungstermin}{%
402   \ClassWarningNoLine{ebsthesis}{%
403     Kein \noexpand\einreichungstermin angegeben}}
404 \newcommand*{\einreichungstermin}[1]{%
405   \renewcommand{\theeinreichungstermin}{#1}}
406 \newcommand{\thepruefungstermin}{%
407   \ClassWarningNoLine{ebsthesis}{%
408     Kein \noexpand\pruefungstermin angegeben}}
409 \newcommand*{\pruefungstermin}[1]{%

```

```

410 \renewcommand{\thepruefungstermin}{#1}}
411 \newcommand{\thehochschulsignatur}{1540}
412 \newcommand*{\hochschulsignatur}[1]{%
413 \renewcommand{\thehochschulsignatur}{#1}}
414 \RequirePackage{array}[2003/12/17]
415 \renewcommand{\maketitle}{%
416 \renewcommand{\and}{\tabularnewline &}
417 \begin{titlepage}
418 \begin{singlespacing}
419 \begin{center}
420 {\Large\bfseries Dissertation}\\
421 zur Erlangung des akademischen Grades\\
422 \thegrad\par
423 \vspace{\stretch{1000}}
424 {\LARGE\bfseries\thetitel\par\medskip\Large\mdseries\theuntertitel\par}
425 \vspace{\stretch{1618}}
426 \begin{tabular}{@{}>{\bfseries}ll@{}}
427 Fachbereich:&\thefachbereich\tabularnewline
428 Hochschule:&\thehochschule\tabularnewline
429 Hochschulsignatur:&\thehochschulsignatur\tabularnewline
430 Kandidat:&\thekandidat\tabularnewline
431 Geburtsort:&\thegeburtsort\tabularnewline
432 Referenten:&\thereferenten\tabularnewline
433 Einreichungstermin:&\theeinreichungstermin\tabularnewline
434 Pr"ufungstermin:&\thepruefungstermin\tabularnewline
435 \end{tabular}
436 \end{center}
437 \end{singlespacing}
438 \end{titlepage}
439 \startcontents[main]%
440 \startcontents[appendix]%
441 \stopcontents[appendix]%
442 \startlist[main]{lof}%
443 \startlist[appendix]{lof}%
444 \stoplist[appendix]{lof}%
445 \startlist[main]{lot}%
446 \startlist[appendix]{lot}%
447 \stoplist[appendix]{lot}%
448 }
449 % Summary and table of contents
450 \newcommand{\inhaltsuebersicht}{%
451 \chapter*{\inhaltsuebersichtname\chaptermark{\inhaltsuebersichtname}}
452 \printcontents[main]{0}{-1}{\setcounter{tocdepth}{1}}%
453 }
454 \renewcommand{\tableofcontents}{%
455 \chapter*{\contentsname\chaptermark{\contentsname}}
456 \printcontents[main]{0}{-1}{\setcounter{tocdepth}{4}}%
457 }
458 % Page composition
459 \setcounter{topnumber}{3}

```

```

460 \setcounter{bottomnumber}{2}
461 \setcounter{totalnumber}{4}
462 \renewcommand{\topfraction}{0.85}
463 \renewcommand{\bottomfraction}{0.5}
464 \renewcommand{\textfraction}{0.15}
465 \renewcommand{\floatpagefraction}{0.7}
466 \interfootnotelinepenalty=10000
467 \clubpenalty=10000
468 \widowpenalty=10000
469 \displaywidowpenalty=10000
470 \renewcommand{\frontmatter}{%
471   \cleardoublepage
472   \@mainmatterfalse
473   \pagenumbering{Roman}%
474 }
475 % \newcounter{frontmatterpages}
476 \renewcommand{\mainmatter}{%
477   \cleardoublepage
478   \@mainmattertrue
479 %   \setcounter{frontmatterpages}{\value{page}}%
480   \pagenumbering{arabic}%
481 }
482 \renewcommand{\backmatter}{%
483   \if@openright
484     \cleardoublepage
485   \else
486     \clearpage
487   \fi
488   \@mainmatterfalse
489 %   \pagenumbering{Roman}%
490 %   \setcounter{page}{\value{frontmatterpages}}%
491 }
492 \RequirePackage[nottoc]{tocbibind}[2003/03/13]
493 % Foreword and Preface
494 \newcommand{\geleitwort}{%
495   \chapter*{\geleitwortname\chaptermark{\geleitwortname}}%
496 }
497 \newcommand{\vorwort}{%
498   \chapter*{\vorwortname\chaptermark{\vorwortname}}%
499 }
500 % List of Symbols
501 \RequirePackage[noprefix]{nomenc1}[2005/03/31]
502 \RequirePackage{mdwlist}[1996/05/02]
503 \newcommand{\symbolverzeichnis}{\printnomenclature}
504 \renewcommand{\nomname}{\symbolverzeichnisname}
505 \newlength{\nomindent}
506 \setlength{\nomindent}{3em}
507 \def\thenomenclature{%
508   \chapter*{\nomname\chaptermark{\nomname}}
509   \addcontentsline{toc}{chapter}{\nomname}

```

```

510 \nompreamble
511 \addvspace{10pt}
512 \begin{basedescript}{%
513     \desclabelwidth{\nomindent}
514     \desclabelstyle{\nextlinelabel}
515     \renewcommand*{\makelabel}[1]{##1}
516     \parskip\z@\itemsep\z@%
517 }%
518 }
519 \def\endthenomenclature{%
520 \end{basedescript}
521 \nompostamble%
522 }
523 \makenomenclature
524 % List of Abbreviations
525 \newcommand{\abkuerzungsverzeichnis}{%
526 \chapter*{\abkuerzungsverzeichnisname\chaptermark{%
527     \abkuerzungsverzeichnisname}}
528 \addcontentsline{toc}{chapter}{\abkuerzungsverzeichnisname}
529 \addvspace{10pt}%
530 }
531 % \RequirePackage[printonlyused]{acronym}[2004/11/10]
532 \RequirePackage{acronym}[2004/11/10]
533 \renewcommand*{\acsfont}[1]{\textsc{MakeLowercase{#1}}}
534 \newlength{\acroindent}
535 \setlength{\acroindent}{6em}
536 \renewenvironment{acronym}[1][1]{%
537     \providecommand*{\acro}{\AC@acro}%
538     \long\def\acroextra##1{##1}%
539     \ifx1#1
540         \global\expandafter\let\csname ac@des@mark\endcsname\AC@used
541         \begin{basedescript}{%
542             \desclabelwidth{\acroindent}
543             \desclabelstyle{\nextlinelabel}
544             \renewcommand*{\makelabel}[1]{##1}
545             \parskip\z@\itemsep\z@%
546         }
547     \else
548         \begin{AC@deflist}{#1}%
549     \fi%
550 }%
551 {%
552     \ifx\AC@populated\AC@used\else
553         \item[]\relax
554     \fi
555     \expandafter\ifx\csname ac@des@mark\endcsname\AC@used
556         \end{basedescript}%
557     \else
558         \end{AC@deflist}%
559     \fi}

```

```

560 % Advanced mathematics functions and equation alignment
561 \RequirePackage[tbtags]{amsmath}[2000/07/18]
562 \RequirePackage[all]{onlyamsmath}[2001/10/04]
563 % Scaling factor for graphics
564 \if@gabler
565   \newcommand{\graphicsmag}{1.0000}
566   \newcommand{\smallgraphicsmag}{0.7500}
567   \newcommand{\tinygraphicsmag}{0.5625}
568 \else
569   \newcommand{\graphicsmag}{1.3333}
570   \newcommand{\smallgraphicsmag}{1.0000}
571   \newcommand{\tinygraphicsmag}{0.7500}
572 \fi
573 % Comments
574 \RequirePackage{comment}
575 \if@gabler
576   \includecomment{gabler}
577   \excludecomment{grundregeln}
578 \else
579   \includecomment{grundregeln}
580   \excludecomment{gabler}
581 \fi
582 % Support for Mathematica fonts
583 \if@mathematica
584 % We are using Mathematica fonts
585 \RequirePackage{wrisym}[1999/04/20]
586 \newcommand{\D}{\DifferentialD}
587 \else
588 % We are using Computer Modern fonts
589 \RequirePackage{amssymb}[2002/01/22]
590 \RequirePackage{dsfont}[1995/08/01]
591 \renewcommand{\mathbb}[1]{\mathds{#1}}
592 \DeclareMathSymbol{\D}{\mathord}{operators}{'d}
593 \newcommand{\E}{\mathrm{e}}
594 \newcommand{\I}{\mathrm{i}}
595 \newcommand{\MathLogo}{\emph{Mathematica}}
596 \fi
597 \if@tools
598 % Statistics
599 \DeclareRobustCommand\expect{%
600   \@ifnextchar[{\\ebs@expect}{\ebs@expect []}%
601 }
602 \def\ebs@expectop{\mathbf{E}}
603 \def\ebs@expect{%
604   \@ifnextchar[{\\ebs@@expect}{\ebs@@expect []}%
605 }
606 \def\ebs@@expect[#1]{%
607   \@ifnextchar[{\\ebs@@@expect[#1]}{\ebs@@@expect [][#1]}%
608 }
609 \def\ebs@@@expect[#1][#2]#3{%

```

```

610   \@expectx[#1][#2]{#3}%
611 }
612 \def\@expectx[#1][#2]{#3{%
613   \ifx\relax#1\relax
614     \ifx\relax#2\relax
615       \ebs@expectop\!\left[#3\right]
616     \else
617       \ebs@expectop\!\left[#3\,\middle|\,,#2\right]
618     \fi
619   \else
620     \ifx\relax#2\relax
621       \ebs@expectop_{#1}\!\left[#3\right]
622     \else
623       \ebs@expectop_{#1}\!\left[#3\,\middle|\,,#2\right]
624     \fi
625   \fi
626 }
627 \newcommand{\indic}[1]{\mathbf{1}_{#1}}
628 \newcommand{\var}[1]{\mathbf{V}\!\left[#1\right]}
629 \newcommand{\Var}{\mathrm{Var}}
630 \newcommand{\Cov}{\mathrm{Cov}}
631 \newcommand{\normal}{\mathrm{N}}
632 % Order
633 \newcommand{\order}[1]{\mathrm{0}\!\left(#1\right)}
634 % Sets
635 \newcommand{\Cset}{\mathbf{C}}
636 \newcommand{\Hset}{\mathbf{H}}
637 \newcommand{\Nset}{\mathbf{N}}
638 \newcommand{\Qset}{\mathbf{Q}}
639 \newcommand{\Rset}{\mathbf{R}}
640 \newcommand{\Zset}{\mathbf{Z}}
641 % Absolute value and sign
642 \providecommand{\abs}[1]{\left\lvert#1\right\rvert}
643 \DeclareMathOperator{\sign}{sign}
644 % Evaluated at
645 \RequirePackage{ifthen}[2001/05/26]
646 \newcommand{\evaluatedat}[3][ ]{%
647   \left.#3\right\rvert_{#2}\ifthenelse{\equal{#1}{}}{\relax}{\sim{#1}}}
648 % Other mathematical expressions
649 \DeclareMathOperator*{\argmax}{argmax}
650 % Common (English) abbreviations
651 \newcommand{\eg}{e.g.}
652 \newcommand{\ie}{i.e.}
653 \newcommand{\iid}{i.i.d.}
654 % Common (German) abbreviations
655 % \renewcommand{\dh}{d.\,h.}
656 \newcommand{\cp}{c.\,p.}
657 \newcommand{\idR}{i.\,d.\,R.}
658 \newcommand{\mE}{m.\,E.}
659 \newcommand{\uU}{u.\,U.}

```

```

660 \newcommand{\zB}{z.\,B.}
661 % Theorems
662 \newcommand{\theoremname}{Theorem}
663 \newcommand{\lemmaname}{Lemma}
664 \newcommand{\propositionname}{Proposition}
665 \newcommand{\corollaryname}{Corollary}
666 \newcommand{\definitionname}{Definition}
667 \newcommand{\conjecturename}{Conjecture}
668 \newcommand{\examplename}{Example}
669 \newcommand{\remarkname}{Remark}
670 % \newcommand{\notename}{Note}
671 \newcommand{\casename}{Case}
672 % Babel support for theorems
673 \AtBeginDocument{%
674   \@ifpackageloaded{babel}{%
675     \addto\extrasenglish{%
676       \renewcommand{\theoremname}{Theorem}
677       \renewcommand{\lemmaname}{Lemma}
678       \renewcommand{\propositionname}{Proposition}
679       \renewcommand{\corollaryname}{Corollary}
680       \renewcommand{\definitionname}{Definition}
681       \renewcommand{\conjecturename}{Conjecture}
682       \renewcommand{\examplename}{Example}
683       \renewcommand{\remarkname}{Remark}
684 % \renewcommand{\notename}{Note}
685       \renewcommand{\casename}{Case}%
686     }
687     \addto\extrasngerman{%
688       \renewcommand{\theoremname}{Theorem}
689       \renewcommand{\lemmaname}{Lemma}
690       \renewcommand{\propositionname}{Satz}
691       \renewcommand{\corollaryname}{Korollar}
692       \renewcommand{\definitionname}{Definition}
693       \renewcommand{\conjecturename}{Vermutung}
694       \renewcommand{\examplename}{Beispiel}
695       \renewcommand{\remarkname}{Bemerkung}
696 % \renewcommand{\notename}{Anmerkung}
697       \renewcommand{\casename}{Fall}%
698     }%
699   }\relax}%
700 }
701 \RequirePackage{amsthm}[2004/08/06]
702 \theoremstyle{plain}
703 \newtheorem{thm}{\theoremname}[chapter]
704 \newtheorem{lem}[thm]{\lemmaname}
705 \newtheorem{prop}[thm]{\propositionname}
706 \newtheorem{cor}{\corollaryname}[chapter]
707 \theoremstyle{definition}
708 \newtheorem{defn}{\definitionname}[chapter]
709 \newtheorem{conj}{\conjecturename}[chapter]

```

```
710 \newtheorem{exp}{\examplename}[chapter]
711 \theoremstyle{remark}
712 \newtheorem*{rem}{\remarkname}
713 % \newtheorem*{note}{\notename}
714 \newtheorem{case}{\casename}
715 \fi
716 \endinput
717 </ebsthesis>
```