

The nputhesis class*

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第 1 节 简介

第 2 节 使用方法

2.1 加载文类

加载 nputhesis 文档类

```
\documentclass[twoside, UTF8, phd, AutoFakeBold]{nputhesis}
```

若需生成盲评版本, 添加选项 dbr 即可, 如

```
\documentclass[twoside, UTF8, phd, dbr, AutoFakeBold]{nputhesis}
```

*This document corresponds to nputhesis v0.6.3, dated 2020/02/18.

2.2 加载常用宏包

```
\usepackage{lipsum}
```

2.3 参考文献

推荐使用 biblatex 处理参考文献. 参考文献格式使用 gb7714-2015, 其详细信息请参考 <https://github.com/hushidong/biblatex-gb7714-2015>. 宏包 biblatex-gb7714-2015 已包含在 TeXLive 和 MikTeX 中. 使用如下命令载入 biblatex 宏包即可.

```
\usepackage[backend=biber,
             style=gb7714-2015, maxbibnames=3,minbibnames=3,
             gbnamefmt=givenahead,
             doi=false,
             url=false,
             %
             gbpub=false
]{biblatex}
```

上面的选项 gbnamefmt 需要使用 v1.0k 以上版本的 biblatex-gb7714-2015. 如果宏包版本不能满足, 可以注释掉选项 gbnamefmt=givenahead.

然后使用 addbibresource 添加参考文献文件 ref.bib.

```
\addbibresource{ref.bib}
```

2.4 变量设置

设置学校编号, 分类号, 题目, 姓名等信息

```
\schoolno{10699}
\classno{0.242}
\secretlevel{公开}
\authorno{0000999999}
\title[LaTeX\ Template of NPU Thesis]{西工大硕博学位论文 LaTeX 模板}
\author[\dbr{San Zhang}]{\dbr{张三}}
\major[Philosophy in Mathematics]{数学}
\supervisor[\dbr{Si Li}]{\dbr{李四}}
\applydate[April 2046]{2046~年~4~月}
\support{本文研究得到某某基金(编号:XXXXXXX)资助。}
```

2.5 开始文档

使用 makecover 生成封面: 包括外封面和内封面, 然后用 frontmatter 分割封面和正文部分.

```
\begin{document}
\makecover
\frontmatter
```

2.6 摘要部分

中文摘要

```
\begin{abstract}
本模板基本实现了西北工业大学硕博论文格式要求: 封皮, 页眉页脚,
章节标题格式, 参考文献格式等.
\begin{keywords}
学位论文, LaTeX 模板, 西工大
```

```
\end{keywords}  
\end{abstract}
```

英文摘要

```
\begin{Abstract}  
  We implement the class |npthesis| for the thesis of NWPU.  
  \begin{Keywords}  
    Thesis Template, \LaTeX, NPU  
  \end{Keywords}  
\end{Abstract}
```

2.7 目录和符号表

```
\tableofcontents  
\printnomenclature
```

正文中使用 `\nomenclature{<sym>}{<text explanation>}` 向符号表中添加内容.

2.8 正文部分

使用 `mainmatter` 开始正文.

```
\mainmatter
```

正文结构

```
\chapter{绪论}  
\section{\TeX 和 \LaTeX 介绍}  
\section{npthesis 简介}  
\chapter{基础知识}  
\section{基本命令}  
\section{宏包}
```

2.8.1 图与表

2.9 参考文献, 附录等

```
\backmatter  
% 以下两种参考文献格式, 根据实际宏包使用情况添加  
\printbibliography           % biblatex 输出参考文献方式  
% \bibliographystyle{gbt7714-2005} % 传统输出参考文献方式  
% \bibliography{ref}          % 传统输出参考文献方式  
  
% \Appendix % 如果有多个附录, 可重复使用该命令, 自动按字母编号.  
  
\Thanks      % 致谢  
  
\Work  
\papersection % 以下填写发表论文情况  
  
\begin{npulist}  
  \item {\bf \dbr{S. Zhang}}, \dbr{S. Li}. NPU 硕博学位论文  
    \LaTeX\ 模板 [D]. 2019.  
\end{npulist}  
  
\researchsection % 以下填写参加科研情况  
\begin{npulist}  
  \item NPU \LaTeX 模板. 编号: 000000000, 参与.  
  \item NPU \LaTeX 模板. 编号: 000000001, 参与.
```

```
\item NPU \LaTeX 模板. 编号: 000000002, 参与.
\end{npulist}
```

2.10 结束文档

```
\statement
\end{document}
```

2.11 完整的例子

```
1 <*sample>
2 \documentclass[twoside, UTF8, phd, AutoFakeBold]{nputhesis}
3 \usepackage{lipsum}
4 \usepackage[backend=biber,
5             style=gb7714-2015, maxbibnames=3,minbibnames=3,
6             gbnamefmt=givenahead,
7             doi=false,
8             url=false,
9             ]{biblatex}
10 \addbibresource{ref.bib}
11 \schoolno{10699}
12 \classno{0.242}
13 \secretlevel{公开}
14 \authorno{0000999999}
15 \title[\LaTeX\ Template of NPU Thesis]{西工大硕博学位论文 \LaTeX 模板}
16 \author[\dbr{San Zhang}]{\dbr{张三}}
17 \major[Philosophy in Mathematics]{数学}
18 \supervisor[\dbr{Si Li}]{\dbr{李四}}
19 \applydate[April 2046]{2046~年~4~月}
20 \support{本文研究得到某某基金(编号:XXXXXX)资助。}
21 \begin{document}
22 \makecover
23 \frontmatter
24
25 \begin{abstract}
26 本模板基本实现了西北工业大学硕博论文格式要求: 封皮, 页眉页脚,
27 章节标题格式, 参考文献格式等.
28 \begin{keywords}
29 学位论文, \LaTeX\ 模板, 西工大
30 \end{keywords}
31 \end{abstract}
32 \begin{Abstract}
33 We implement the class |nputhesis| for the thesis of NWPU.
34 \begin{Keywords}
35 Thesis Template, \LaTeX, NPU
36 \end{Keywords}
37 \end{Abstract}
38
39 \tableofcontents
40 \printnomenclature
41
42 \mainmatter
43
44 \chapter{绪论}
45 \section{\TeX 和 \LaTeX 介绍}
46 \section{nputhesis 简介}
47 \chapter{基础知识}
48 \section{基本命令}
49 \section{宏包}
50
51 \backmatter
52
53 \printbibliography % biblatex 输出参考文件方式
54
```

```

55 \Thanks      % 致谢
56
57 \Work
58 \papersection % 以下填写发表论文情况
59
60 \begin{npulist}
61   \item {\bf \dbr{S. Zhang}}, \dbr{S. Li}. NPU 硕博学位论文
62     \LaTeX\ 模板 [D]. 2019.
63 \end{npulist}
64
65 \researchsection % 以下填写参加科研情况
66 \begin{npulist}
67   \item NPU \LaTeX 模板. 编号: 000000000, 参与.
68   \item NPU \LaTeX 模板. 编号: 000000001, 参与.
69   \item NPU \LaTeX 模板. 编号: 000000002, 参与.
70 \end{npulist}
71 \statement
72 \end{document}
73 </sample>

```

第3节 代码实现

3.1 文档选项

使用布尔变量实现文档的选项设置

```

74 <*class>
75 \newif\if@npu@phd
76 \newif\if@npu@blankinfo
77 \newif\if@npu@dbr      % for double-blind review
78 \def\set@npu@phd{\@npu@phdtrue}
79 \def\set@npu@ma{\@npu@phdfalse}

```

使用 `xkeyval` 声明文档选项

```
80 \RequirePackage{xkeyval}
```

声明选项 `blankinfo`, 用于控制是否现实空白页标识信息.

```
81 \DeclareOptionX{blankinfo}[false]{\csname @npu@blankinfo#1\endcsname}
```

声明选项 `thesistype`, 可选参数为 `phd` 和 `ma`, 用于选择文档类型: 博士论文还是硕士论文.

```
82 \DeclareOptionX{thesistype}[phd]{\csname set@npu@#1\endcsname}
```

声明选项 `phd` 和 `ma`, 要废弃的选项, 被 `thesistype` 代替, 请使用 `thesistype`.

```
83 \DeclareOptionX{phd}{\@npu@phdtrue}
84 \DeclareOptionX{ma}{\@npu@phdfalse}

```

声明选项 `dbr`, 用于生成盲评版本, 参考 `\dbr`.

```
85 \DeclareOptionX{dbr}[true]{\csname @npu@dbr#1\endcsname}
```

该文类基于 `book` 类实现, 加载 `book` 文类.

```

86 \DeclareOptionX*{\PassOptionsToClass{\CurrentOption}{book}}
87 \ExecuteOptionsX{thesistype=phd}
88 \ExecuteOptionsX{dbr=false}
89 \ProcessOptionsX \relax
90 \LoadClass{book}

```

3.2 使用的宏包

加载需要的宏包

```

91 \RequirePackage{geometry}
92 \RequirePackage{xcolor}
93 \RequirePackage{fancyhdr}
94 \RequirePackage{titletoc}
95 \RequirePackage{caption}
96 \RequirePackage{ulem}
97 \RequirePackage{amsthm}

```

```

98 \RequirePackage{amsmath}
99 \RequirePackage{amsfonts}
100 \RequirePackage{setspace}
101 \RequirePackage{longtable}
102 \RequirePackage{booktabs}
103 \RequirePackage{tabularx}
104 \RequirePackage{multirow}
105 \RequirePackage{graphicx}
106 \RequirePackage[heading=true,zihao=-4]{ctex}
107 \RequirePackage{ifxetex}
108 \ifxetex
109   \setmainfont{Times New Roman}
110 \fi

```

3.3 盲评命令

当 dbr 选项开启, 即 dbr=true 时在文件中 \dbr 命令以隐藏作者相关信息, 使用命令 \dbr{张三} 将会使用黑框代替 ‘张三’ 的显示。

```

111 \newcommand\@npu@replace[1]{\%
112   \setlength{\fboxsep}{0pt}\%
113   \colorbox{black}{\phantom{#1}}\}%
114 \newcommand{\dbr}[1]{\if@npu@dbr \@npu@replace{#1}\relax\else #1\fi}

```

3.4 设置页面版式格式

```

115 \geometry{paperwidth=210mm,paperheight=297mm,%
116   left=2.5cm,right=2.5cm,top=2.54cm,bottom=2.54cm}
117 \topmargin=-10.4mm
118 \headheight=17pt
119 \footskip=8mm
120 \headsep=5mm

```

页眉设置

```

121 \pagestyle{fancy}
122 % \renewcommand\chaptermark[1]{\markboth{%
123 %   \if@mainmatter%
124 %     %\ifnum\arabic{chapter}>0%
125 %       \arabic{chapter}\quad%
126 %     %\fi%
127 %   \fi#1}\}%
128 \fancyhf{}
129 \fancyhead[EC]{\songti\zihao{-5}\npu@rightmark}
130 \fancyhead[OC]{\songti\zihao{-5}\leftmark}
131 \fancyfoot[C]{\songti\zihao{5}\thepage}
132 \renewcommand{\headrule}{\%
133   \hrule width\headwidth height2.8pt \vspace{1pt}\%
134   \hrule width\headwidth height0.8pt}
135 \fancypagestyle{plain}{\thispagestyle{fancy}}
136 \newcommand{\clearpagestyle}{\clearpage{\pagestyle{empty}\cleardoublepage}}

```

3.5 设置默认章节标题格式

```

137 \ifx\ctexset\undefined
138   \CTEXsetup[ % name={,}, number={\arabic{chapter}},% use default value
139     beforekip={0pt}, afterskip={20pt}]{chapter}
140   \CTEXsetup[nameformat={\heiti\zihao{3}\bf}]{chapter}
141   \CTEXsetup[titleformat={\heiti\zihao{3}}]{chapter}
142   \CTEXsetup[format={\heiti\zihao{4}}]{section}
143   \CTEXsetup[format={\heiti\zihao{-4}}]{subsection}
144 \else
145   \ctexset{
146     contentsname = {\npu@contents}
147   }
148   % title format of chapter
149   \ctexset{

```

```

150 % chapter/name={,}, % use default value in ctex
151 % chapter/number=\arabic{chapter}, % use default value in ctex
152 chapter/beforeskip={0pt},
153 chapter/afterskip={20pt},
154 chapter/format={\heiti\zihao{3}\centering}
155 }
156 % title format of section
157 \ctexset{
158   section/name={,},
159   % section/beforeskip={2ex plus .5ex minus .1ex},
160   % section/afterskip={1ex plus .1ex},
161   section/format={\heiti\zihao{4}}
162 }
163 % title format of subsection
164 \ctexset{
165   subsection/name={,},
166   % subsection/beforeskip={2ex plus .5ex minus .1ex},
167   % subsection/afterskip={1ex plus .1ex},
168   subsection/format={\heiti\zihao{-4}}
169 }
170 \ctexset{
171   subsubsection/name={,},
172   % subsubsection/beforeskip={1ex plus .3ex minus .1ex},
173   % subsubsection/afterskip={.5ex plus .1ex},
174   subsubsection/format={\heiti\zihao{-4}}
175 }
176 \ctexset{
177   paragraph/name={,},
178   % paragraph/beforeskip={1ex plus .3ex minus .1ex},
179   % paragraph/afterskip={.5ex plus .1ex},
180   paragraph/format={\heiti\zihao{-4}}
181 }
182 \ctexset{
183   subparagraph/name={,},
184   % subparagraph/beforeskip={1ex plus .3ex minus .1ex},
185   % subparagraph/afterskip={.5ex plus .1ex},
186   subparagraph/format={\heiti\zihao{-4}}
187 }
188 \fi

```

3.6 目录字体设置

```

189 \def\@contentfont{\songti\zihao{-4}}
190 \titlecontents{chapter}[0pt]{\@contentfont}
191   {\thecontentslabel\hspace{.5em}}{}
192   {\hspace{.5em}\titlerule*{.}\contentspage}
193 \titlecontents{section}[15pt]{\@contentfont}
194   {\thecontentslabel\quad}{}
195   {\hspace{.5em}\titlerule*{.}\contentspage}
196 \titlecontents{subsection}[30pt]{\@contentfont}
197   {\thecontentslabel\quad}{}
198   {\hspace{.5em}\titlerule*{.}\contentspage}

```

3.7 变量设置

定义变量,用于存储包括论文题目,作者,导师等信息.

```

199 \def\title{\@ifnextchar[\@title{\@title{}}}
200 \def\author{\@ifnextchar[\@author{\@author{}}}
201 \def\major{\@ifnextchar[\@major{\@major{}}}
202 \def\supervisor{\@ifnextchar[\@supervisor{\@supervisor{}}}
203 \def\applydate{\@ifnextchar[\@applydate{\@applydate{}}}
204 \def\@title[#1]#2{\def\@titleen{#1}\def\@title{#2}}
205 \def\@author[#1]#2{\def\@authoren{#1}\def\@author{#2}}
206 \def\@major[#1]#2{\def\@majoren{#1}\def\@major{#2}}
207 \def\@supervisor[#1]#2{\def\@supervisoren{#1}\def\@supervisor{#2}}
208 \def\@applydate[#1]#2{\def\@applydateen{#1}\def\@applydate{#2}}
209 \def\@title{\@titleen}

```

```

210 \def\@author{}\def\@author@en{}
211 \def\@major{}\def\@major@en{}
212 \def\@supervisor{}\def\@supervisor@en{}
213 \def\@applydate{}\def\@applydate@en{}
214 \def\npu@empty{}
215 \def\schoolno#1{\def\@schoolno{#1}}\def\@schoolno{}
216 \def\classno#1{\def\@classno{#1}}\def\@classno{}
217 \def\secretlevel#1{\def\@secretlevel{#1}}\def\@secretlevel{}
218 \def\authorno#1{\def\@authorno{#1}}\def\@authorno{}
219 \def\support#1{\def\@support{#1}}\def\@support{}
220 \if@npu@phd
221   \def\npu@degreename@en{Doctor}
222 \else
223   \def\npu@degreename@en{Master}
224 \fi

```

3.8 设置字体和行距

```

225 % \renewcommand{\normalsize}{\zihao{-4}}
226 \linespread{1.25}

```

3.9 封面

定义外封面

```

227 \def\makeoutercover{
228   \begin{titlepage}
229     \bfseries
230     \linespread{1.25}
231     \begin{center}
232       \hfill% default \bf font
233       \heiti\zihao{5}
234       \newlength{\max@length}
235       \settowidth{\max@length}{\npu@schoolno\npu@comma 2000000000}
236       \newlength{\name@length}
237       \settowidth{\name@length}{\npu@schoolno}
238       \begin{minipage}{\max@length}
239         \vskip.5cm
240         \renewcommand\arraystretch{1.2}
241         \begin{tabular}{|c|c|}\hline
242           \makebox[\name@length][s]{\npu@schoolno} & \@schoolno & \hline
243           \makebox[\name@length][s]{\npu@classno} & \@classno & \hline
244           \makebox[\name@length][s]{\npu@secretlevel}& \@secretlevel & \hline
245           \makebox[\name@length][s]{\npu@authorno} & \@authorno & \hline
246         \end{tabular}
247       \end{minipage}
248       \par\vspace{9cm}
249       \songti\zihao{2}
250       \begin{minipage}[t]{2cm}
251         \hfill\npu@title\
252       \end{minipage}
253       %\hbox to 2.5cm{\hfill \npu@title}
254       \setbox123=\hbox{
255         \begin{minipage}[t]{12cm}
256           \begin{center}
257             \heiti\@title
258           \end{center}
259         \end{minipage} }
260       \setbox124=\hbox{
261         \begin{minipage}[t]{12cm}
262           \begin{center}
263             \uline{\hfill\quad\hfill}\
264             \uline{\hfill\quad\hfill}\
265           \end{center}
266         \end{minipage} }
267       \hskip-0.5cm
268       \copy123\kern-\wd123\box124

```



```

269 \zihao{3}
270 \par\vspace{2.5\baselineskip}
271 \begin{minipage}{5cm}
272 {\kaishu\npu@author} \uline{\hfill\@author\hfill}
273 \end{minipage}
274 \par\vspace{2.5\baselineskip}
275 \settowidth{\name@length}{\npu@applydate}
276 \begin{minipage}{12.5cm}
277 \noindent
278 \makebox[\name@length][s]{\npu@major}%
279 {\uline{\hfill{\@major}\hfill}} \par
280 \vspace{0.5\baselineskip}
281 \makebox[\name@length][s]{\npu@supervisor}%
282 {\uline{\hfill\@supervisor\hfill}} \par
283 \vspace{0.5\baselineskip}
284 \makebox[\name@length][s]{\npu@applydate}%
285 {\uline{\hfill\@applydate\hfill}} \par
286 \end{minipage}
287 \vspace{2\baselineskip}
288 \end{center}
289 \end{titlepage}
290 \clearpagestyle
291 }

```

定义内封面

```

292 \def\makeinnercover@zh{
293 \begin{titlepage}
294 \linespread{1.25}
295 \vspace*{2cm}
296 \begin{center}
297 \settowidth{\name@length}{\zihao{3}\npu@schoolname}
298 \divide\name@length by 12
299 \multiply\name@length by 17
300 \makebox[\name@length][s]{\zihao{3}\npu@schoolname}
301 \vskip5mm
302 \settowidth{\name@length}{\zihao{1}\npu@degree}
303 \divide\name@length by 12
304 \multiply\name@length by 17
305 \makebox[\name@length][s]{\zihao{1}\npu@degree}
306 \vskip5mm
307 \centerline{\zihao{4}\npu@degreeclass}
308 \vskip5cm
309 \zihao{2}
310 \begin{minipage}[t]{2.5cm}
311 \hfil\npu@title\npu@comma
312 \end{minipage}
313 \setbox123=\hbox{
314 \begin{minipage}[t]{11cm}
315 \begin{center}
316 \@title
317 \end{center}
318 \end{minipage}}
319 \setbox124=\hbox{
320 \begin{minipage}[t]{11cm}
321 \begin{center}
322 \uline{\hfill\quad\hfill}\\\
323 \uline{\hfill\quad\hfill}\\\
324 \end{center}
325 \end{minipage}}
326 \hskip-1cm
327 \copy123\kern-\wd123\box124
328 \par\vspace{4cm}
329 \zihao{3}
330 \settowidth{\name@length}{\npu@major}
331 \begin{minipage}{8cm}
332 \noindent
333 \makebox[\name@length][s]{\npu@author}\npu@comma%

```

```

334         \uline{\hfill\@author\hfill}      \par
335         \vspace{0.25\baselineskip}
336         \makebox[\name@length][s]{\npu@major}\npu@comma%
337         \uline{\hfill\@major\hfill}      \par
338         \vspace{0.25\baselineskip}
339         \makebox[\name@length][s]{\npu@supervisor}\npu@comma%
340         \uline{\hfill\@supervisor\hfill}\par
341         \vspace{1\baselineskip}
342     \end{minipage}
343     \vspace{2\baselineskip}
344     \par\makebox[30mm]{\@applydate}\hfill
345 \end{center}
346 \end{titlepage}
347 \clearpagestyle
348 }

```

定义英文封面

```

349 \def\makeinnercover@en{
350     \begin{titlepage}
351         \linespread{1.25}
352         \vspace*{1.5cm}
353         \zihao{3}
354         \begin{center}
355             {\bf
356                 %\Large
357                 \@title@en \\
358                 \vspace{3\baselineskip}
359                 \zihao{-3}
360                 By\\
361                 \ifx\@author@en\npu@empty\quad\else\@author@en\fi\\
362                 \vspace{1\baselineskip}
363                 Under the Supervision of Professor\\
364                 \ifx\@supervisor@en\npu@empty\quad\else\@supervisor@en\fi\\
365                 %\Large
366                 \vspace{4\baselineskip}
367                 A Dissertation Submitted to\\
368                 Northwestern Polytechnical University\\
369                 \vspace{1\baselineskip}
370                 In Partial Fulfillment of the Requirement\\
371                 for the Degree of\\
372                 \npu@degreename@en\ of \@major@en\\
373                 \vspace{4\baselineskip}
374                 Xi'an P. R. China\\
375                 \@applydate@en
376             \end{center}
377         \end{titlepage}
378         \clearpagestyle
379     }

```

整合以上封面为一个命令 `makecover`

```

380 \def\makecover{\makeoutercover\makeinnercover@zh\makeinnercover@en}

```

正文之前使用罗马数字编号

```

381 \let\npu@frontmatter\frontmatter
382 \def\frontmatter{\npu@frontmatter\pagenumbering{Roman}}

```

3.10 选项 `blankinfo` 的实现

重定义 `cleardoublepage`, 用于实现 `blankinfo` 选项的功能.

```

383 \def\cleardoublepage{\clearpage\if@twoside \ifodd\c@page\else
384     \hbox{}
385     \vspace*{\fill}
386     \begin{center}\Large
387         \if@npu@blankinfo
388             \textcolor{gray!60}{This Page Intentionally Left Blank!}
389         \fi

```

```

390 \end{center}
391 \vspace{\fill}
392 \thispagestyle{empty}
393 \newpage
394 \if@twocolumn\hbox{}\newpage\fi\fi\fi}

```

3.11 摘要环境

定义中英文摘要环境

```

395 \newenvironment{abstract}{%
396 \chapter{\npu@abstract}%\addcontentsline{toc}{chapter}{\npu@abstract}%
397 \newenvironment{keywords}{%
398 \vspace{2\baselineskip}\par\textbf{\npu@keywords\npu@comma}}{}
399 }{\vfill\zihao{5}\@support}
400
401 \newenvironment{Abstract}{%
402 \chapter{\npu@Abstract}%\addcontentsline{toc}{chapter}{\npu@Abstract}%
403 \newenvironment{Keywords}{%
404 \vspace{2\baselineskip}\par\textbf{\npu@Keywords\npu@comma}}{}{}

```

3.12 图表标题设置

```

405 \DeclareCaptionFont{song}{\songti\zihao{5}}
406 \captionsetup{labelsep=quad, font=song}
407 \captionsetup[figure]{aboveskip=10pt, belowskip=10pt}
408 \captionsetup[table]{aboveskip=10pt, belowskip=10pt}
409 \renewcommand\thetable{\arabic{chapter}-\arabic{table}}
410 \renewcommand\thefigure{\arabic{chapter}-\arabic{figure}}
411 \renewcommand\theequation{\arabic{chapter}-\arabic{equation}}

```

3.13 表格和列表环境

```

412 \let\ldtabular\tabular
413 \let\endldtabular\endtabular
414 \renewenvironment{tabular}{\zihao{5}\ldtabular}{\endldtabular}
415
416 % define nputabu environment which will stretch to textwidth
417 \newcolumnntype{L}{>\raggedright\arraybackslash}X}
418 \newcolumnntype{R}{>\raggedleft\arraybackslash}X}
419 \newcolumnntype{C}{>\centering\arraybackslash}X}
420 \newenvironment{nputabu}[1][\zihao{5}]%
421 {#1\tabularx{\textwidth}}{\endtabularx}
422
423 \newenvironment{npulist}{%
424 \begin{group}\renewcommand{\labelenumi}{[\theenumi].}\enumerate}%
425 {\endenumerate\endgroup}

```

3.14 特殊章节设置

附录自动以英文字母编号

```

426 \let\npu@chapter\chapter
427 \def\npu@star@chapter#1{\npu@chapter{#1}}
428 \def\chapter{\secdef\npu@chapter\npu@star@chapter}
429 \newcounter{npu@c@appendix}
430 \setcounter{npu@c@appendix}{0}
431 \def\Appendix{\addtocounter{npu@c@appendix}{1}}%
432 \chapter{\npu@appendix\Alph{npu@c@appendix}}

```

致谢章节

```

433 \def\Thanks{\chapter{\npu@thanks}}

```

参加科研工作章节, 设置标题内容

```

434 \newcommand\Work{\chapter{\npu@work}}
435 \newcommand\papersection{\section*{\npu@work@paper}}
436 \newcommand\researchsection{\section*{\npu@work@research}}

```

声明页

```

437 \def\statement{
438   \begin{titlepage}
439     \linespread{1.5}
440     \parskip=7pt
441     \vspace*{0pt}
442     \songti\zihao{4}
443     \centerline{\bf \npu@schoolname}
444     \centerline{\bf \npu@p@statement}
445     \songti\zihao{5}
446     \npu@longp@statement\par
447     \npu@a@signature\npu@comma\underline{\qqquad\qqquad\qqquad} \hfill
448     \npu@s@signature\npu@comma\underline{\qqquad\qqquad\qqquad} \par
449     \hskip 3cm \npu@ymd \hfill\hskip 3cm \npu@ymd
450     \vspace*{30pt}
451     \hbox to \hsize{\leaders\hbox to 1em{\hss--\hss}\hfill}
452
453     \vspace*{50pt}
454     \songti\zihao{4}
455     \centerline{\bf \npu@schoolname}
456     \centerline{\bf \npu@c@statement}
457     \songti\zihao{5}
458     \npu@longc@statement\par
459     \hskip5.5cm
460     \hfill\npu@a@signature\npu@comma\underline{\qqquad\qqquad\qqquad}\par
461     \hfill\hskip8.5cm \npu@ymd
462   \end{titlepage}}

```

3.15 默认定理环境

定义定理环境

```

463 % ref amsthdoc.pdf
464 \newtheoremstyle{nputheorem}% name
465   {0pt}% Space above
466   {0pt}% Space below
467   {\itshape}% Body font
468   {}% Indent amount
469   {\bfseries}% Theorem head font
470   {}% Punctuation after theorem head
471   {.5em}% Space after theorem head
472   {}% Theorem head spec (can be left empty, meaning ‘normal’ )
473
474 \newtheoremstyle{npuplain}% name
475   {0pt}% Space above
476   {0pt}% Space below
477   {}% Body font
478   {}% Indent amount
479   {\bfseries}% Theorem head font
480   {}% Punctuation after theorem head
481   {.5em}% Space after theorem head
482   {}% Theorem head spec (can be left empty, meaning ‘normal’ )
483
484 \theoremstyle{npuplain} % set default style to npuplain

```

3.16 定义符号表

```

485 \RequirePackage{nomencl} % add symbol notation
486 \RequirePackage{multicol} % for two column notation
487 % \AtEndPreamble{\makenomenclature}
488 \makenomenclature
489 \renewcommand{\nomname}{\npu@nomname}
490
491 % code come from @egreg
492 % https://tex.stackexchange.com/questions/78764/two-column-nomenclature
493 \ifundefined{chapter}

```

```

494 {\def\wilh@nomsection{section}}
495 {\def\wilh@nomsection{chapter}}
496
497 \def\thenomenclature{%
498 % \newlength{\npu@columnsep@save}
499 % \setlength{\npu@columnsep@save}{\columnsep}
500 % \setlength{\columnsep}{20pt}
501 % \begin{multicols}{2}[%
502 % \csname\wilh@nomsection\endcsname*{\nomname}
503 % \if@intoc\addcontentsline{toc}{\wilh@nomsection}{\nomname}\fi
504 % \nompreamble % \raggedcolumns
505 % ]
506 \list{}{%
507 % \labelsep=15pt
508 % \labelwidth\nom@tempdim
509 % \leftmargin\labelwidth
510 % \advance\leftmargin\labelsep
511 % \itemsep\nomitemsep
512 % \let\makelabel\nomlabel}%
513 }
514 \def\endthenomenclature{%
515 % \endlist
516 % \end{multicols}
517 % \setlength{\columnsep}{\npu@columnsep@save}
518 \nompreamble}

```

3.17 配置变量

```

519 \def\npu@degreename@zh{\if@npu@phd 博士\else 硕士\fi}
520 \def\npu@comma{~::~}
521 \def\npu@schoolno{学校代码}
522 \def\npu@classno{分类号}
523 \def\npu@secretlevel{密级}
524 \def\npu@authorno{学号}
525 \def\npu@title{题目}
526 \def\npu@author{作者}
527 \def\npu@major{学科、专业}
528 \def\npu@supervisor{指导教师}
529 \def\npu@applydate{申请学位日期}
530 \def\npu@schoolname{西北工业大学}
531 \def\npu@degree{\npu@degreename@zh 学位论文}
532 \def\npu@degreeclass{(学位研究生)}
533 \def\npu@rightmark{西北工业大学\npu@degreename@zh 学位论文}
534 \def\npu@Abstract{Abstract}
535 \def\npu@abstract{摘\quad 要}
536 \def\npu@Keywords{Key words}
537 \def\npu@keywords{关键词}
538 \def\npu@contents{目\quad 录}
539 \def\npu@nomname{符号表}
540 \def\npu@appendix{附\quad 录}
541 \def\npu@thanks{致\quad 谢}
542 \def\npu@work{攻读\npu@degreename@zh 学位期间发表的学术论文和参加科研情况}
543 \def\npu@work@paper{发表学术论文}
544 \def\npu@work@research{参加科研情况}
545 \def\npu@p@statement{学位论文知识产权声明书}
546 \def\npu@c@statement{学位论文原创性声明}
547 \def\npu@ymd{年\quad 月\quad 日}
548 \def\npu@a@signature{学位论文作者签名}
549 \def\npu@s@signature{指导教师签名}
550 \long\def\npu@longp@statement{%
551 本人完全了解学校有关保护知识产权的规定，即：研究生在校攻读学位期间论文工作的
552 知识产权单位属于西北工业大学。学校有权保留并向国家有关部门或机构送交论文的复
553 印件和电子版。本人允许论文被查阅和借阅。学校可以将本学位论文的全部或部分内
554 容编入有关数据库进行检索，可以采用影印、缩印或扫描等复制手段保存和汇编本学位
555 论文。同时本人保证，毕业后结合学位论文研究课题再撰写的文章一律注明作者单位
556 为西北工业大学。
557 \par 保密论文待解密后适用本声明。}
558 \long\def\npu@longc@statement{%

```

559 秉承学校严谨的学风和优良的科学道德，本人郑重声明：所呈交的学位论文，是本人在
560 导师的指导下进行研究工作所取得的成果。尽我所知，除文中已经注明引用的内容和致
561 谢的地方外，本论文不包含任何其他个人或集体已经公开发表或撰写过的研究成果，不
562 包含本人或其他已申请学位或其他用途使用过的成果。对本文的研究做出重要贡献的个
563 人和集体，均已在文中以明确方式表明。
564 \par 本人学位论文与资料若有不实，愿意承担一切相关的法律责任。}
565 </class>

版本历史

v0.6.1	(2019/12/28)	Make the line under the title longer	1
General: Add ‘nputabu’ environment	1	Remark: “AutoFakeBold” option can be used when	
Add theorem style ‘npuplain’, and set it to default	1	load this document class to make the font in the cover	
Delete option workbib	1	page as bold font	1
Modify font size in tabular environment to ‘zihao5’	1	v0.6.3	(2020/02/18)
Replace nputhesis.bst by gbt7714-2005.bst	1	General: Add option ‘dbr’ for double-blind review	1
v0.6.2	(2020/01/10)	Initial version use dtx	1
General: Adjust the skip of the chapter title	1		

代码索引

意大利体的数字表示描述对应索引项的页码;带下划线的数字表示定义对应索引项的代码行号;罗马字体的数字表示使用对应索引项的代码行号。

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