

The nputhesis class*

Zongze Yang

yangzongze@gmail.com

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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

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

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

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 myrefs.bib.

```
\addbibresource{myrefs.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 |nputhesis| 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{nputhesis 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{filecontents}
5 \usepackage[backend=biber,
6             style=gb7714-2015, maxbibnames=3,minbibnames=3,
7             gbnamefmt=givenahead,
8             doi=false,
9             url=false,
10            ]{biblatex}
11 \begin{filecontents}{myrefs.bib}
12 @Book{Knuth1986,
13   Title           = {The \TeX book},
14   Author          = {Donald~Ervin Knuth},
15   Publisher       = {Addison-Wesley},
16   Year            = {1986}
17 }
18 @Book{Lamport1994,
19   Title           = {A Document Preparation System},
20   Author          = {Leslie Lamport},
21   Publisher       = {Addison-Wesley},
22   Year            = {1994}
23 }
24
25 @Book{Liu2013,
26   Title           = {\LaTeX 入门},
27   Author          = {刘海洋},
28   Publisher       = {电子工业出版社},
29   Year            = {2013}
30 }
31 \end{filecontents}
32 \addbibresource{myrefs.bib}
33 \schoolno{10699}
34 \classno{0.242}
35 \secretlevel{公开}
36 \authorno{0000999999}
37 \title[\LaTeX\ Template of NPU Thesis]{西工大硕博学位论文 \LaTeX 模板}
38 \author[\dbr{San Zhang}]{\dbr{张三}}
39 \major[Philosophy in Mathematics]{数学}
40 \supervisor[\dbr{Si Li}]{\dbr{李四}}
41 \applydate[April 2046]{2046~年~4~月}
42 \support{本研究得到某某基金(编号:XXXXXXX)资助。}
43 \begin{document}
44 \makecover
45 \frontmatter

```

```

46
47 \begin{abstract}
48 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，
49 章节标题格式，参考文献格式等.
50 \begin{keywords}
51 学位论文, \LaTeX\ 模板, 西工大
52 \end{keywords}
53 \end{abstract}
54 \begin{Abstract}
55 We implement the class |nputhesis| for the thesis of NPU.
56 \begin{Keywords}
57 Thesis Template, \LaTeX, NPU
58 \end{Keywords}
59 \end{Abstract}
60
61 \tableofcontents
62 \printnomenclature
63
64 \mainmatter
65
66 \chapter{绪论}
67 \section{\TeX 和 \LaTeX 介绍}
68 \section{nputhesis 简介}
69 \chapter{基础知识}
70 \section{基本命令}
71 \section{宏包}
72
73 \backmatter
74
75 \printbibliography % biblatex 输出参考文献方式
76
77 \Thanks % 致谢
78
79 \Work
80 \papersection % 以下填写发表论文情况
81
82 \begin{npulist}
83 \item {\bf \dbr{S. Zhang}}, \dbr{S. Li}. NPU 硕博学位论文
84 \LaTeX\ 模板 [D]. 2019.
85 \end{npulist}
86
87 \researchsection % 以下填写参加科研情况
88 \begin{npulist}
89 \item NPU \LaTeX 模板. 编号: 000000000, 参与.
90 \item NPU \LaTeX 模板. 编号: 000000001, 参与.
91 \item NPU \LaTeX 模板. 编号: 000000002, 参与.
92 \end{npulist}
93 \statement
94 \end{document}
95 </sample>

```

第 3 节 安装

从 github 下载的压缩包已所有文件, 直接解压即可使用. 下面介绍从 dtx 文件生成相关文件的过程.

3.1 编译 nputhesis.dtx

运行如下命令即可得到所有文件

```
xelatex nputhesis.dtx
```

但是这样生成文档 nputhesis.pdf 中没有索引等信息, 因此需要进行多次编译. 下面给出生成 pdf 文件的两种方式.

3.1.1 方法一

进入 `nputhesis.dtx` 所在文件夹, 依次运行下面命令.

```
xelatex nputhesis.dtx
makeindex -s gglo.ist -o nputhesis.gls nputhesis.glo
makeindex -s gind.ist -o nputhesis.ind nputhesis.idx
xelatex nputhesis.dtx
xelatex nputhesis.dtx
del nputhesis.gls nputhesis.glo nputhesis.ind nputhesis.idx
del nputhesis.ilg nputhesis.aux nputhesis.log nputhesis.toc
del nputhesis.hd nputhesis.out
```

3.1.2 方法二

使用 `latexmk` 进行编译. 首先, 进入 `nputhesis.dtx` 所在文件夹, 创建文件 `dtxrc` 内容如下:

```
@cus_dep_list = (@cus_dep_list, "glo gls 0 makegls");
sub makegls {
    system("makeindex -s gglo.ist -o $_[0].gls $_[0].glo"); }
$makeindex="makeindex -s gind.ist -o %D %S";
push @generated_exts, 'idx', 'ind', 'glo', 'gls', 'hd';
```

然后在该文件夹运行如下命令即可生成所需文件.

```
latexmk -xelatex nputhesis.dtx -r dtxrc
latexmk -c nputhesis.dtx -r dtxrc
```

第4节 代码实现

4.1 文档选项

使用布尔变量实现文档的选项设置

```
96 < *class>
97 \newif\if@npu@phd
98 \newif\if@npu@blankinfo
99 \newif\if@npu@dbr % for double-blind review
100 \def\set@npu@phd{\@npu@phdtrue}
101 \def\set@npu@ma{\@npu@phdfalse}
```

使用 `xkeyval` 声明文档选项

```
102 \RequirePackage{xkeyval}
```

声明选项 `blankinfo`, 用于控制是否现实空白页标识信息.

```
103 \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.

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

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

```
105 \DeclareOptionX{phd}{\@npu@phdtrue}
```

```
106 \DeclareOptionX{ma}{\@npu@phdfalse}
```

声明选项 `dbr`, 用于生成盲评版本, 参考 `\dbr`.

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

该类基于 `book` 类实现, 加载 `book` 文类.

```
108 \DeclareOptionX*{\PassOptionsToClass{\CurrentOption}{ctexbook}}
```

```
109 \ExecuteOptionsX{thesistype=phd}
```

```
110 \ExecuteOptionsX{dbr=false}
```

```
111 \ProcessOptionsX \relax
```

```
112 \LoadClass[heading=true,zihao=-4]{ctexbook}
```

4.2 使用的宏包

加载需要的宏包

```

113 \RequirePackage{geometry}
114 \RequirePackage{xcolor}
115 \RequirePackage{fancyhdr}
116 \RequirePackage{titletoc}
117 \RequirePackage{caption}
118 \RequirePackage{ulem}
119 \RequirePackage{amsthm}
120 \RequirePackage{amsmath}
121 \RequirePackage{amsfonts}
122 \RequirePackage{setspace}
123 \RequirePackage{longtable}
124 \RequirePackage{booktabs}
125 \RequirePackage{tabularx}
126 \RequirePackage{multirow}
127 \RequirePackage{graphicx}
128 % \RequirePackage[heading=true,zihao=-4]{ctex}
129 \RequirePackage{ifxetex}
130 \ifxetex
131   \setmainfont{Times New Roman}
132 \fi

```

4.3 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.

```

133 \newcommand\@npu@replace[1]{\%
134   \setlength{\fboxsep}{0pt}\%
135   \colorbox{black}{\phantom{#1}}\}%
136 \newcommand{\dbr}[1]{\if@npu@dbr \@npu@replace{#1}\relax\else #1\fi}

```

4.4 设置页面版式格式

```

137 \geometry{paperwidth=210mm,paperheight=297mm,%
138   left=2.5cm,right=2.5cm,top=2.54cm,bottom=2.54cm}
139 \topmargin=-10.4mm
140 \headheight=17pt
141 \footskip=8mm
142 \headsep=5mm

```

页眉设置

```

143 \pagestyle{fancy}
144 % \renewcommand\chaptermark[1]{\markboth{\%
145 %   \if@mainmatter%
146 %     %\ifnum\arabic{chapter}>0%
147 %       \arabic{chapter}\quad%
148 %     %\fi%
149 %   \fi#1}\%}
150 \fancyhf{}
151 \fancyhead[EC]{\songti\zihao{-5}\npu@rightmark}
152 \fancyhead[OC]{\songti\zihao{-5}\leftmark}
153 \fancyfoot[C]{\songti\zihao{5}\thepage}
154 \renewcommand{\headrule}{\%
155   \hrule width\headwidth height2.8pt \vspace{1pt}\%
156   \hrule width\headwidth height0.8pt}
157 \fancypagestyle{plain}{\thispagestyle{fancy}}
158 \newcommand{\clearpagestyle}{\clearpage{\pagestyle{empty}\cleardoublepage}}

```

4.5 设置默认章节标题格式

```

159 \ifx\ctexset\undefined
160   \CTEXsetup[ % name={,}, number={\arabic{chapter}},% use default value
161     beforekip={0pt}, afterskip={20pt}]{chapter}

```

```

162 \CTEXsetup[nameformat={\heiti\zihao{3}\bf}]{chapter}
163 \CTEXsetup[titleformat={\heiti\zihao{3}}]{chapter}
164 \CTEXsetup[format={\heiti\zihao{4}}]{section}
165 \CTEXsetup[format={\heiti\zihao{-4}}]{subsection}
166 \else
167 \ctexset{
168   contentsname = {\npu@contents}
169 }
170 % title format of chapter
171 \ctexset{
172   % chapter/name={,}, % use default value in ctex
173   % chapter/number=\arabic{chapter}, % use default value in ctex
174   chapter/beforeskip={0pt},
175   chapter/afterskip={20pt},
176   chapter/format={\heiti\zihao{3}\centering}
177 }
178 % title format of section
179 \ctexset{
180   section/name={,},
181   % section/beforeskip={2ex plus .5ex minus .1ex},
182   % section/afterskip={1ex plus .1ex},
183   section/format={\heiti\zihao{4}}
184 }
185 % title format of subsection
186 \ctexset{
187   subsection/name={,},
188   % subsection/beforeskip={2ex plus .5ex minus .1ex},
189   % subsection/afterskip={1ex plus .1ex},
190   subsection/format={\heiti\zihao{-4}}
191 }
192 \ctexset{
193   subsubsection/name={,},
194   % subsubsection/beforeskip={1ex plus .3ex minus .1ex},
195   % subsubsection/afterskip={.5ex plus .1ex},
196   subsubsection/format={\heiti\zihao{-4}}
197 }
198 \ctexset{
199   paragraph/name={,},
200   % paragraph/beforeskip={1ex plus .3ex minus .1ex},
201   % paragraph/afterskip={.5ex plus .1ex},
202   paragraph/format={\heiti\zihao{-4}}
203 }
204 \ctexset{
205   subparagraph/name={,},
206   % subparagraph/beforeskip={1ex plus .3ex minus .1ex},
207   % subparagraph/afterskip={.5ex plus .1ex},
208   subparagraph/format={\heiti\zihao{-4}}
209 }
210 \fi

```

4.6 目录字体设置

```

211 \def\@contentfont{\songti\zihao{-4}}
212 \titlecontents{chapter}[0pt]{\@contentfont}
213   {\thecontentslabel\hspace{.5em}}{}
214   {\hspace{.5em}\titlerule*{.}\contentspage}
215 \titlecontents{section}[15pt]{\@contentfont}
216   {\thecontentslabel\quad}{}
217   {\hspace{.5em}\titlerule*{.}\contentspage}
218 \titlecontents{subsection}[30pt]{\@contentfont}
219   {\thecontentslabel\quad}{}
220   {\hspace{.5em}\titlerule*{.}\contentspage}

```

4.7 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.

```

221 \def\title{\@ifnextchar[\@title{\@title[]}}

```



```

222 \def\author{\ifnextchar[\@@author{\@@author{}}}
223 \def\major{\ifnextchar[\@@major{\@@major{}}}
224 \def\supervisor{\ifnextchar[\@@supervisor{\@@supervisor{}}}
225 \def\applydate{\ifnextchar[\@@applydate{\@@applydate{}}}
226 \def\@title[#1]#2{\def\@title@en{#1}\def\@title{#2}}
227 \def\@author[#1]#2{\def\@author@en{#1}\def\@author{#2}}
228 \def\@major[#1]#2{\def\@major@en{#1}\def\@major{#2}}
229 \def\@supervisor[#1]#2{\def\@supervisor@en{#1}\def\@supervisor{#2}}
230 \def\@applydate[#1]#2{\def\@applydate@en{#1}\def\@applydate{#2}}
231 \def\@title{}\def\@title@en{}
232 \def\@author{}\def\@author@en{}
233 \def\@major{}\def\@major@en{}
234 \def\@supervisor{}\def\@supervisor@en{}
235 \def\@applydate{}\def\@applydate@en{}
236 \def\npu@empty{}
237 \def\schoolno#1{\def\@schoolno{#1}}\def\@schoolno{}
238 \def\classno#1{\def\@classno{#1}}\def\@classno{}
239 \def\secretlevel#1{\def\@secretlevel{#1}}\def\@secretlevel{}
240 \def\authorno#1{\def\@authorno{#1}}\def\@authorno{}
241 \def\support#1{\def\@support{#1}}\def\@support{}
242 \if@npu@phd
243   \def\npu@degreename@en{Doctor}
244 \else
245   \def\npu@degreename@en{Master}
246 \fi

```

4.8 设置字体和行距

```

247 % \renewcommand{\normalsize}{\zihao{-4}}
248 \linespread{1.25}

```

4.9 封面

定义外封面

```

249 \def\makeoutercover{
250   \begin{titlepage}
251     \bfseries
252     \linespread{1.25}
253     \begin{center}
254       \hfill% default \bf font
255       \heiti\zihao{5}
256       \newlength{\max@length}
257       \settowidth{\max@length}{\npu@schoolno\npu@comma 2000000000}
258       \newlength{\name@length}
259       \settowidth{\name@length}{\npu@schoolno}
260       \begin{minipage}{\max@length}
261         \vskip.5cm
262         \renewcommand\arraystretch{1.2}
263         \begin{tabular}{|c|c|}\hline
264           \makebox[\name@length][s]{\npu@schoolno} & \@schoolno & \hline
265           \makebox[\name@length][s]{\npu@classno} & \@classno & \hline
266           \makebox[\name@length][s]{\npu@secretlevel}& \@secretlevel & \hline
267           \makebox[\name@length][s]{\npu@authorno} & \@authorno & \hline
268         \end{tabular}
269       \end{minipage}
270       \par\vspace{9cm}
271       \songti\zihao{2}
272       \begin{minipage}[t]{2cm}
273         \hfill\npu@title\hfill
274       \end{minipage}
275       %\hbox to 2.5cm{\hfill \npu@title}
276       \setbox123=\hbox{
277         \begin{minipage}[t]{12cm}
278           \begin{center}
279             \heiti\@title
280           \end{center}

```

```

281     \end{minipage} }
282     \setbox124=\hbox{
283     \begin{minipage}[t]{12cm}
284     \begin{center}
285     \uline{\hfill\quad\hfill}\\
286     \uline{\hfill\quad\hfill}\\
287     \end{center}
288     \end{minipage} }
289     \hskip-0.5cm
290     \copy123\kern-\wd123\box124
291     \zihao{3}
292     \par\vspace{2.5\baselineskip}
293     \begin{minipage}{5cm}
294     {\kaishu\npu@author} \uline{\hfill\@author\hfill}
295     \end{minipage}
296     \par\vspace{2.5\baselineskip}
297     \settowidth{\name@length}{\npu@applydate}
298     \begin{minipage}{12.5cm}
299     \noindent
300     \makebox[\name@length][s]{\npu@major}%
301     {\uline{\hfill{\@major}\hfill}} \par
302     \vspace{0.5\baselineskip}
303     \makebox[\name@length][s]{\npu@supervisor}%
304     {\uline{\hfill\@supervisor\hfill}} \par
305     \vspace{0.5\baselineskip}
306     \makebox[\name@length][s]{\npu@applydate}%
307     {\uline{\hfill\@applydate\hfill}} \par
308     \end{minipage}
309     \vspace{2\baselineskip}
310     \end{center}
311     \end{titlepage}
312     \clearpagestyle
313 }

```

定义内封面

```

314 \def\makeinnercover@zh{
315   \begin{titlepage}
316     \linespread{1.25}
317     \vspace*{2cm}
318     \begin{center}
319       \settowidth{\name@length}{\zihao{3}\npu@schoolname}
320       \divide\name@length by 12
321       \multiply\name@length by 17
322       \makebox[\name@length][s]{\zihao{3}\npu@schoolname}
323       \vskip5mm
324       \settowidth{\name@length}{\zihao{1}\npu@degree}
325       \divide\name@length by 12
326       \multiply\name@length by 17
327       \makebox[\name@length][s]{\zihao{1}\npu@degree}
328       \vskip5mm
329       \centerline{\zihao{4}\npu@degreeclass}
330       \vskip5cm
331       \zihao{2}
332       \begin{minipage}[t]{2.5cm}
333       \hfil\npu@title\npu@comma
334       \end{minipage}
335       \setbox123=\hbox{
336       \begin{minipage}[t]{11cm}
337       \begin{center}
338       \@title
339       \end{center}
340       \end{minipage}}
341       \setbox124=\hbox{
342       \begin{minipage}[t]{11cm}
343       \begin{center}
344       \uline{\hfill\quad\hfill}\\
345       \uline{\hfill\quad\hfill}\\

```

```

346         \end{center}
347     \end{minipage}}
348     \hskip-1cm
349     \copy123\kern-\wd123\box124
350     \par\vspace{4cm}
351     \zihao{3}
352     \settowidth{\name@length}{\npu@major}
353     \begin{minipage}{8cm}
354         \noindent
355         \makebox[\name@length][s]{\npu@author}\npucomma%
356         \uline{\hfill\@author\hfill} \par
357         \vspace{0.25\baselineskip}
358         \makebox[\name@length][s]{\npu@major}\npucomma%
359         \uline{\hfill\@major\hfill} \par
360         \vspace{0.25\baselineskip}
361         \makebox[\name@length][s]{\npu@supervisor}\npucomma%
362         \uline{\hfill\@supervisor\hfill}\par
363         \vspace{1\baselineskip}
364     \end{minipage}
365     \vspace{2\baselineskip}
366     \par\makebox[30mm]{\@applydate}\hfill
367 \end{center}
368 \end{titlepage}
369 \clearpagestyle
370 }

```

定义英文封面

```

371 \def\makeinnercover@en{
372     \begin{titlepage}
373         \linespread{1.25}
374         \vspace*{1.5cm}
375         \zihao{3}
376         \begin{center}
377             {\bf
378             %\Large
379             \@title@en \\
380             \vspace{3\baselineskip}
381             \zihao{-3}
382             By\\
383             \ifx\@author@en\npu@empty\quad\else\@author@en\fi\\
384             \vspace{1\baselineskip}
385             Under the Supervision of Professor\\
386             \ifx\@supervisor@en\npu@empty\quad\else\@supervisor@en\fi\\
387             %\Large
388             \vspace{4\baselineskip}
389             A Dissertation Submitted to\\
390             Northwestern Polytechnical University\\
391             \vspace{1\baselineskip}
392             In Partial Fulfillment of the Requirement\\
393             for the Degree of\\
394             \npu@degreename@en\ of \@major@en\\
395             \vspace{4\baselineskip}
396             Xi'an P. R. China\\
397             \@applydate@en
398         \end{center}
399     \end{titlepage}
400     \clearpagestyle
401 }

```

整合以上封面为一个命令 makecover

```

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

```

正文之前使用罗马数字编号

```

403 \let\npu@frontmatter\frontmatter
404 \def\frontmatter{\npu@frontmatter\pagenumbering{Roman}}

```

4.10 选项 blankinfo 的实现

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

```

405 \def\cleardoublepage{\clearpage\if@twoside \ifodd\c@page\else
406   \hbox{}
407   \vspace*{\fill}
408   \begin{center}\Large
409     \if@npu@blankinfo
410       \textcolor{gray!60}{This Page Intentionally Left Blank!}
411     \fi
412   \end{center}
413   \vspace{\fill}
414   \thispagestyle{empty}
415   \newpage
416   \if@twocolumn\hbox{}\newpage\fi\fi\fi}

```

4.11 摘要环境

定义中英文摘要环境

```

417 \newenvironment{abstract}{%
418   \chapter{\npu@abstract}%\addcontentsline{toc}{chapter}{\npu@abstract}%
419   \newenvironment{keywords}{%
420     \vspace{2\baselineskip}\par\textbf{\npu@keywords\npu@comma}}{}
421   }{\vfill\zihao{5}\@support}
422
423 \newenvironment{Abstract}{%
424   \chapter{\npu@Abstract}%\addcontentsline{toc}{chapter}{\npu@Abstract}%
425   \newenvironment{Keywords}{%
426     \vspace{2\baselineskip}\par\textbf{\npu@Keywords\npu@comma}}{}{}

```

4.12 图表标题设置

```

427 \DeclareCaptionFont{song}{\songti\zihao{5}}
428 \captionsetup{labelsep=quad, font=song}
429 \captionsetup[figure]{aboveskip=10pt, belowskip=10pt}
430 \captionsetup[table]{aboveskip=10pt, belowskip=10pt}
431 \renewcommand\thetable{\arabic{chapter}-\arabic{table}}
432 \renewcommand\thefigure{\arabic{chapter}-\arabic{figure}}
433 \renewcommand\theequation{\arabic{chapter}-\arabic{equation}}

```

4.13 表格和列表环境

```

434 \let\@ldtabular\tabular
435 \let\end@ldtabular\endtabular
436 \renewenvironment{tabular}{\zihao{5}\@ldtabular}{\end@ldtabular}
437
438 % define nputabu environment which will stretch to textwidth
439 \newcolumntype{L}{>\raggedright\arraybackslash}X}
440 \newcolumntype{R}{>\raggedleft\arraybackslash}X}
441 \newcolumntype{C}{>\centering\arraybackslash}X}
442 \newenvironment{nputabu}[1][\zihao{5}]{%
443   {\#1\tabularx{\textwidth}}{\endtabularx}
444
445 \newenvironment{nplist}{%
446 \begin{group}\renewcommand{\labelenumi}{[\theenumi].}\enumerate}%
447 {\endenumerate\endgroup}

```

4.14 特殊章节设置

附录自动以英文字母编号

```

448 \let\npu@chapter\chapter
449 \def\npu@star@chapter#1{\npu@chapter{#1}}
450 \def\chapter{\secdef\npu@chapter\npu@star@chapter}
451 \newcounter{npu@c@appendix}
452 \setcounter{npu@c@appendix}{0}

```

```

453 \def\Appendix{\addtocounter{npu@c@appendix}{1}%
454 \chapter{\npu@appendix\Alph{npu@c@appendix}}}

```

致谢章节

```

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

```

参加科研工作章节, 设置标题内容

```

456 \newcommand\Work{\chapter{\npu@work}}
457 \newcommand\papersection{\section*{\npu@work@paper}}
458 \newcommand\researchsection{\section*{\npu@work@research}}

```

声明页

```

459 \def\statement{
460 \begin{titlepage}
461 \linespread{1.5}
462 \parskip=7pt
463 \vspace*{0pt}
464 \songti\zihao{4}
465 \centerline{\bf \npu@schoolname}
466 \centerline{\bf \npu@p@statement}
467 \songti\zihao{5}
468 \npu@longp@statement\par
469 \npu@a@signature\npu@comma\underline{\qqquad\qqquad\qqquad} \hfill
470 \npu@s@signature\npu@comma\underline{\qqquad\qqquad\qqquad} \par
471 \hskip 3cm \npu@ymd \hfill\hskip 3cm \npu@ymd
472 \vspace*{30pt}
473 \hbox to \hsize{\leaders\hbox to 1em{\hss--\hss}\hfill}
474
475 \vspace*{50pt}
476 \songti\zihao{4}
477 \centerline{\bf \npu@schoolname}
478 \centerline{\bf \npu@c@statement}
479 \songti\zihao{5}
480 \npu@longc@statement\par
481 \hskip5.5cm
482 \hfill\npu@a@signature\npu@comma\underline{\qqquad\qqquad\qqquad}\par
483 \hfill\hskip8.5cm \npu@ymd
484 \end{titlepage}}

```

4.15 默认定理环境

定义定理环境

```

485 % ref amsthdoc.pdf
486 \newtheoremstyle{nputheorem}% name
487 {0pt}% Space above
488 {0pt}% Space below
489 {\itshape}% Body font
490 {}% Indent amount
491 {\bfseries}% Theorem head font
492 {}% Punctuation after theorem head
493 {.5em}% Space after theorem head
494 {}% Theorem head spec (can be left empty, meaning ‘normal’ )
495
496 \newtheoremstyle{npuplain}% name
497 {0pt}% Space above
498 {0pt}% Space below
499 {}% Body font
500 {}% Indent amount
501 {\bfseries}% Theorem head font
502 {}% Punctuation after theorem head
503 {.5em}% Space after theorem head
504 {}% Theorem head spec (can be left empty, meaning ‘normal’ )
505
506 \theoremstyle{npuplain} % set default style to npuplain

```

4.16 定义符号表

```

507 \RequirePackage{nomencl} % add symbol notation
508 \RequirePackage{multicol} % for two column notation
509 % \AtEndPreamble{\makenomenclature}
510 \makenomenclature
511 \renewcommand{\nomname}{\npu@nomname}
512
513 % code come from @egreg
514 % https://tex.stackexchange.com/questions/78764/two-column-nomenclature
515 \ifundefined{chapter}
516 {\def\wilh@nomsection{section}}
517 {\def\wilh@nomsection{chapter}}
518
519 \def\thenomenclature{%
520 % \newlength{\npu@columnsep@save}
521 % \setlength{\npu@columnsep@save}{\columnsep}
522 % \setlength{\columnsep}{20pt}
523 % \begin{multicols}{2}[%
524 % \csname\wilh@nomsection\endcsname*{\nomname}
525 % \if@intoc\addcontentsline{toc}{\wilh@nomsection}{\nomname}\fi
526 % \nompreamble % \raggedcolumns
527 % ]
528 \list{}{%
529 \labelsep=15pt
530 \labelwidth\nom@tempdim
531 \leftmargin\labelwidth
532 \advance\leftmargin\labelsep
533 \itemsep\nomitemsep
534 \let\makelabel\nomlabel}%
535 }
536 \def\endthenomenclature{%
537 \endlist
538 % \end{multicols}
539 % \setlength{\columnsep}{\npu@columnsep@save}
540 \nompostamble}

```

4.17 配置变量

```

541 \def\npu@degreename@zh{\if@npu@phd 博士\else 硕士\fi}
542 \def\npu@comma{~::~}
543 \def\npu@schoolno{学校代码}
544 \def\npu@classno{分类号}
545 \def\npu@secretlevel{密级}
546 \def\npu@authorno{学号}
547 \def\npu@title{题目}
548 \def\npu@author{作者}
549 \def\npu@major{学科、专业}
550 \def\npu@supervisor{指导教师}
551 \def\npu@applydate{申请学位日期}
552 \def\npu@schoolname{西北工业大学}
553 \def\npu@degree{\npu@degreename@zh 学位论文}
554 \def\npu@degreeclass{(学位研究生)}
555 \def\npu@rightmark{西北工业大学\npu@degreename@zh 学位论文}
556 \def\npu@Abstract{Abstract}
557 \def\npu@abstract{摘\quad 要}
558 \def\npu@Keywords{Key words}
559 \def\npu@keywords{关键词}
560 \def\npu@contents{目\quad 录}
561 \def\npu@nomname{符号表}
562 \def\npu@appendix{附\quad 录}
563 \def\npu@thanks{致\quad 谢}
564 \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}
565 \def\npu@work@paper{发表学术论文}
566 \def\npu@work@research{参加科研情况}
567 \def\npu@p@statement{学位论文知识产权声明书}
568 \def\npu@c@statement{学位论文原创性声明}
569 \def\npu@ymd{年\quad 月\quad 日}

```

```
570 \def\npu@a@signature{学位论文作者签名}  
571 \def\npu@s@signature{指导教师签名}  
572 \long\def\npu@longp@statement{%  
573 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  
574 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  
575 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  
576 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  
577 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为西  
578 北工业大学。  
579 \par 保密论文待解密后适用本声明。}  
580 \long\def\npu@longc@statement{%  
581 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  
582 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  
583 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  
584 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  
585 人和集体，均已在文中以明确方式表明。  
586 \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。}  
587 </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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