

HiThesis: 哈尔滨工业大学学位论文模板

初砚硕

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摘要

该宏包为哈尔滨工业大学一校三区本、硕、博中英文毕业论文、开题和中期报告以及博后出站报告模板。

免责声明

1. 本模板的发布遵守 L^AT_EX Project Public License，使用前请认真阅读协议内容。
2. 本模板为作者根据哈尔滨工业大学教务处颁发的《哈尔滨工业大学本科生毕业论文撰写规范》，哈尔滨工业大学研究生院颁发的《哈尔滨工业大学研究生学位论文撰写规范》编写而成，为方便哈尔滨工业大学学生撰写毕业论文使用。
3. 哈尔滨工业大学教务处和研究生院只提供毕业论文写作指南，不提供官方模板（包括 MS word），也不会授权第三方模板为官方模板，所以此模板仅为写作指南的参考实现，不保证格式审查老师不提意见。任何由于使用本模板而引起的论文格式审查问题均与本模板作者无关。
4. 任何个人或组织以本模板为基础进行修改、扩展而生成的新的专用模板，请严格遵守 L^AT_EX Project Public License 协议。由于违犯协议而引起的任何纠纷争端均与本模板作者无关。

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1 模板介绍

hiTHESIS (HarbinInstitute of Technology L^AT_EX Thesis Template) 是为了帮助哈尔滨工业大学毕业生撰写毕业论文而编写的 L^AT_EX 论文模板。

本文档将尽量完整的介绍模板的使用方法, 如有不清楚之处可以参考示例文档或者根据第 3.1 节说明提问, 有兴趣者都可以参与完善此手册, 也非常欢迎对代码的贡献。

注意: 模板的作用在于减少论文写作过程中格式调整的时间。前提是遵守模板的用法, 否则即便使用了 hiTHESIS 也难以保证输出的论文符合学校规范。

2 安装

未来 hiTHESIS 将已经包含在主要的 T_EX 发行版中, 一般不需要安装, 可以利用发行版自带更新工具自动更新。阅读文档可以使用以下命令:

```
$ texdoc hithesis
```

如果要使用开发版, 需自己下载, hiTHESIS 相关链接:

- github: <https://github.com/dustincys/hithesis>
- oschina: <https://git.oschina.net/dustincys/hithesis>
或码云另外一个域名 <https://gitee.com/dustincys/hithesis>

注意: 如果登录不了 github 的同学可以登录 oschina 下载。

2.1 模板的组成

下表列出了 hiTHESIS 的主要文件及其功能介绍:

文件 (夹)	功能描述
hithesis.ins	DocStrip 驱动文件 (开发用)
hithesis.dtx	DocStrip 源文件 (开发用)
hithesisbook.cls	模板类文件
hithesisbook.cfg	模板配置文件
hithesis.bst	参考文献样式文件
hithesis.ist	索引样式文件
reference.bib	文档参考文献
main.tex	示例文档主文件
front/	正文之前内容
body/	正文内容
body/	正文之后内容
figures/	示例文档图片路径
hithesis.sty	为示例文档加载其它宏包

文件（夹）	功能描述
Makefile	Makefile
latexmkrc	latexmk 配置文件
README.md	Readme
hithesis.pdf	用户手册（本文档）

几点说明：

- `hithesisbook.cls` 和 `hithesisbook.cfg` 可由 `hithesis.ins` 和 `hithesis.dtx` 生成。
- 使用前阅读文档：`hithesis.pdf`。
- 默认的生成的论文中含有丰富的格式示例，使用前请仔细阅读 `main.pdf`。

2.2 生成模板

提示：若使用 \TeX 发行版自带的 *hiThesis* 或 *Gihitb/OSChina* 上发布的版本，可忽略此节，直接阅读第 2.3 节。若下载 CTAN 包或者 *Gihitb/OSChina* 开发代码，请阅读本节了解生成模板文件的步骤。

模板解压缩后生成文件夹 `hithesis-vX.Y.Z`¹，其中包括：模板源文件（`hithesis.ins` 和 `hithesis.dtx`），参考文献样式 `hithesis.bst`，示例文档（`main.tex`，`shuji.tex`，`hithesis.sty`²，`data/` 和 `figures/` 和 `ref/`）。在使用之前需要先生成模板文件和配置文件（具体命令细节请参考 `README.md` 和 `Makefile`）：

```
$ cd hithesis-vX.Y.Z
# 生成 hithesisbook.cls 和 hithesisbook.cfg
$ latex hithesis.ins

# 下面的命令用来生成用户手册，可以不执行
$ xelatex hithesis.dtx
$ makeindex -s gind.ist -o hithesis.ind hithesis.idx
$ makeindex -s gglo.ist -o hithesis.gls hithesis.glo
$ xelatex hithesis.dtx
$ xelatex hithesis.dtx % 生成说明文档 hithesis.pdf
```

2.3 生成论文

本节介绍几种常见的生成论文的方法。用户可根据自己的情况选择。

2.3.1 \XeLaTeX

很多用户对 \LaTeX 命令执行的次数不太清楚。一个基本的原则是多次运行 \LaTeX 命令直至不再出现警告。下面给出生成示例文档的详细过程（# 开头的行为注释），首先来看推荐的 `xelatex` 方式：

¹`vX.Y.Z` 为版本号。

²可能用到的包以及一些命令定义都放在这里，以免 `hithesisbook.cls` 过分臃肿。

```
# 1. 发现里面的引用关系，文件后缀 .tex 可以省略
$ xelatex main

# 2. 编译参考文件源文件，生成 bbl 文件
$ bibtex main

# 3. 下面解决引用
$ xelatex main
$ xelatex main # 如果不需要生成索引此时生成完整的 pdf 文件
$ splitindex main -- -s hithesis.ist # 自动生成索引
$ xelatex main.tex
```

2.3.2 latexmk

`latexmk` 命令支持全自动生成 L^AT_EX 编写的文档，并且支持使用不同的工具链来进行生成，它会自动运行多次工具直到交叉引用都被解决。下面给出了一个用 `latexmk` 调用 `xelatex` 生成最终文档的示例：

```
# 一句话就够了！
$ latexmk -xelatex main
```

2.3.3 make

提示：若要使用 `make` 编译，需自行下载模板。因为 T_EX 发行版中的 `Makefile` 不在当前目录。

上面的方法虽然不复杂，但是每次都输入还是非常罗嗦，所以 `hiThesis` 提供了一个 `Makefile`：

```
$ make clean
$ make cls # 生成 hithesisbook.cls 和 hithesisbook.cfg
$ make doc # 生成说明文档 hithesis.pdf
$ make thesis # 生成示例文档 main.pdf
```

`hiThesis` 的 `Makefile` 默认用 `latexmk` 调用 `xelatex` 编译，此外还支持直接用 `xelatex` 编译。如有需要可修改 `Makefile` 开头的参数或通过命令行传递参数（请参看 `README.md`），进一步还可以修改 `latexmkrc` 进行定制。

2.4 升级

`hiThesis` 升级非常简单，可以通过 T_EX 发行版的包管理工具自动更新发行版，也可以下载最新的开发版，将 `hithesis.ins`，`hithesis.dtx` 拷贝至工作目录覆盖相应的文件，然后运行：

```
$ latex hithesis.ins
```

生成新的类文件和配置文件即可。也可以直接拷贝 `hithesisbook.cls`，`hithesisbook.cfg` 和 `hithesis.ist`，免去上面命令的执行。

3 使用说明

本手册假定用户已经能处理一般的 L^AT_EX 文档，并对 B_BT_EX 有一定了解。如果从来没有接触过 T_EX 和 L^AT_EX，建议先学习相关的基础知识。

3.1 关于提问

按照优先级推荐提问的位置如下：

- [Gihitb Issues](#)
- [OSChina Issues](#)
- hithesis QQ 讨论群：259959600

3.2 示例文件

模板核心文件有三个：hithesisbook.cls，hithesisbook.cfg 和 hithesis.bst，但是如果用户没有示例文档会发现很难下手。所以推荐新用户从模板自带的示例文档入手，里面包括了论文写作用到的所有命令及其使用方法，只需要用自己的内容进行相应替换就可以。对于不清楚的命令可以查阅本手册。下面的例子描述了模板中章节的组织形式，来自于示例文档，具体内容可以参考模板附带的 main.tex。

```
% !Mode:: "TeX:UTF-8"
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
%      ,
%      /\^/\
%      | \ / |          CONGRATULATIONS!
%      | |   |          SPRING IS IN THE AIR!
%      \ \   /
%      "\ \ /"          _ _
%                        _{ ' }_
%      ||                hithesis v3      { ` . ! . ` }
%      ||                ',_ / Y \_, '
%      || ,              dustincys        { _ , _ }
%      | \  ||  | \      Email: yanshuoc@gmail.com      |
%      | | ||  | |      https://yanshuo.name            ( \ |  / )
%      | | ||  / /      \ |  //
%      \ \ || / /      https://github.com/dustincys/hithesis  | //
%      ` \ \ / ^  \ \  \ . /  \ \ /  //  \ \ . /  \ \  //  \ \ | / /
%      ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\documentclass[fontset=fandol,type=master,campus=shenzhen,language=english]{hithesisbook}
% No space between options
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Mandatory option
% type=doctor|master|bachelor|postdoc
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Optional option (with default value)
```

```

% campus=shenzhen/weihai/harbin
%   Default:harbin
% glue=true/false
%   Line spacing: true means [3,4]mm, false means 3mm.
% tocfour=true/false
%   TOC level four or three
% fontset=windows/mac/ubuntu/fandol/adobe/founder
%   Normally, TeX could detect your OS font automatically. If not, explicitly
%   set your OS here, or, use open source font set
% newgeometry=one/two
%   Geometry of text area in the page. `two' is good for now.
% openright=true/false
%   Force the Chapter page number to be even or not.
% library=true/false
%   Set this option will remove all blank page in your thesis, Library preferred.
% newtxmath=true/false
%   Math font used in the thesis
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\usepackage{hithesis}
\graphicspath{{figures/}}
\begin{document}

\frontmatter
\input{front/cover}
\makecover
\include{front/acknowledgements}
\tableofcontents

\mainmatter
\include{body/eng_regu}

\backmatter
\include{back/conclusion}
\bibliographystyle{hithesis}
\bibliography{reference}
\include{back/publications}
\authorization
%\authorization[scanversion.pdf]
\end{document}

% Local Variables:
% TeX-engine: xetex
% End:

% !Mode:: "TeX:UTF-8"
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
```

```

%      /\^/\
%      | \ / |          CONGRATULATIONS!
%      | |   |          SPRING IS IN THE AIR!
%      \ \   /
%      '\ \ /'          _ _
%      ||              hithesis v3          { ` . ! . ` }
%      ||              ', _ / Y \ _ , '
%      || ,            dustincys           { _ , _ }
%      | \   ||   | \      Email: yanshuoc@gmail.com      |
%      | |   ||   | |      https://yanshuo.name           ( \ |   / )
%      | |   ||   / /      \ |   //
%      \ \ || / /      https://github.com/dustincys/hithesis  | //
%      ` \ \ / ^   \ \   \ . /   \ \ /   //   \ \ . /   \ \   //   \ \ | / /
%      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\documentclass[fontset=fandol,type=postdoc,campus=harbin]{hithesisbook}
% 此处选项中不要有空格
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 必填选项
% type=doctor/master/bachelor/postdoc
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 选填选项（选填选项的缺省值已经尽可能满足了大多数需求，除非明确知道自己有什么
% 需求）
% campus=shenzhen/weihai/harbin
% 含义：校区选项，默认harbin
% glue=true/false
% 含义：由于我工规范中要求字体行距在一个闭区间内，这个选项为true表示tex自
% 动选择，为false表示区间内一个最接近版心要求行数的要求的默认值，缺省值为
% false。
% tocfour=true/false
% 含义：是否添加第四级目录，只对本科文科个别要求四级目录有效，缺省值为
% false
% fontset=windows/mac/ubuntu/fandol/adobe
% 含义：设置字体，默认情况会自动识别系统，然后设置字体。后两个是开源字体，自行
% 下载安装后设置使用。windows是中易字库，窝工默认常用字体，绝对没毛病。mac和
% ubuntu 默认分别是华文和思源字库，理论上用什么字库都行。后两种开源字库的安装
% 方法到谷歌上百度一下什么都有了。Linux非ubuntu发行版、非x86架构机器等如何运行
% 可到github issue上讨论。
% tocblank=true/false
% 含义：目录中第一章之前，是否加一行空白。缺省值为true。
% chapterhang=true/false
% 含义：目录的章标题是否悬挂居中，规范中要求章标题少于15字，所以这个选项
% 有无没什么用，除了特殊需求。缺省值为true。
% fulltime=true/false
% 含义：是否全日制，缺省值为true。非全日制如同同等学力等，要在cover中设置类
% 型，封面中不同格式

```



```

% subtitle=true/false
% 含义：论文题目是否含有副标题，缺省值为false，如果有要在cover中设置副标题内容，封面中显示。
% newgeometry=one/two
% 含义：规范中的自相矛盾之处，版芯是否包含页眉页脚，旧方法是按照包含页眉页脚来设置。该选项是多选选项，如果没有这个选项，缺省值是旧模板的版芯设置方法，如果设置该选项one或two，分别对应两种页眉页码对应版芯线的相对位置。第一种是严格按照规范要求，难看。第二种微调了页眉页码位置，好一点。
% debug=true/false
% 含义：是否显示版芯框和行号，用来调试。默认否。
% openright=true/false
% 含义：博士论文是否要求章节首页必须在奇数页，此选项不在规范中，按个人喜好自行决定。默认否。注意，窝工的默认情况是打印版博士论文要求右翻页，电子版要求非右翻页且无空白页。如果想DIY（或身不由己DIY）在什么地方右翻页，将这个选项设置为false，然后在目标位置添加`\\cleardoublepage`命令即可。
% library=true/false
% 含义：是否为提交到图书馆的电子版。默认否。注意：如果设置成true，那么openright选项将被强制转换为false。
% capcenterlast=true/false
% 含义：图题、表题最后一行是否居中对齐（我工规范要求居中，但不要求居中对齐），此选项不在规范中，按个人喜好自行决定。默认否。
% subcapcenterlast=true/false
% 含义：子图图题最后一行是否居中对齐（我工规范要求居中，但不要求居中对齐），此选项不在规范中，按个人喜好自行决定。默认否。
% absupper=true/false
% 含义：中文目录中的英文摘要在中文目录中的大小写样式歧义，在规范中要求首字母大写，在work样例中是全文大写。该选项控制是否全文大写。默认否。
% bsmainpagenumberline=true/false
% 含义：由于本科生论文官方模板的页码和页眉格式混乱，提供这个选项自定义设置是否在正文中显示页码横线，默认否。
% bsfrontpagenumberline=true/false
% 含义：由于本科生论文官方模板的页码和页眉格式混乱，提供这个选项自定义设置是否在前文中显示页码横线，默认否。
% bsheadrule=true/false
% 含义：由于本科生论文官方模板的页码和页眉格式混乱，提供这个选项自定义设置是否显示页眉横线，默认显示。
% splitbibitem=true/false
% 含义：参考文献每一个条目内能不能断页，应广大刀客要求添加。默认否。
% newtxmath=true/false
% 含义：数学字体是否使用新罗马。默认是。
% chapterbold=true/false
% 含义：本科生章标题在目录和正文中是否加粗
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\\usepackage{hithesis}
\\graphicspath{{figures/}}

```

```

\begin{document}
\frontmatter
\input{front/cover} % 封面
\makecover
\input{front/denotation}%物理量名称表,符合规范为主,有要求添加
\tableofcontents %目录
\mainmatter
\include{body/regu}
\include{body/introduction}
\backmatter
\include{back/conclusion} % 结论
\bibliographystyle{hithesis} %如果没有参考文献时候
\bibliography{reference}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%-- 注意: 以下本硕博、博后书序不一致 --%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 硕博书序
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\begin{appendix}%附录
\input{back/appA.tex}
\end{appendix}
\include{back/publications} % 所发文章
\include{back/ceindex} % 索引, 根据自己的情况添加或者不添加, 选择自动添加或者手工添加。
\authorization %授权
%\authorization[saomiao.pdf] %添加扫描页的命令, 与上互斥
\include{back/acknowledgements} %致谢
\include{back/resume} % 博士学位论文有个人简介
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 本科书序为:
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% \authorization %授权
% % \authorization[saomiao.pdf] %添加扫描页的命令, 与上互斥
% \include{back/acknowledgements} %致谢
% \begin{appendix}%附录
% \input{back/appendix01}%本科生翻译论文
% \end{appendix}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 博后书序
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% \include{back/acknowledgements} %致谢
% \include{back/doctorpublications} % 所发文章
% \include{back/publications} % 所发文章
% \include{back/resume} % 博士学位论文有个人简介
% \include{back/correspondingaddr} %通信地址
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\end{document}

```

```
% Local Variables:
% TeX-engine: xetex
% End:

% !Mode:: "TeX:UTF-8"

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
%      ,
%      /\^/\
%      | \ / |          CONGRATULATIONS!
%      | |   |          SPRING IS IN THE AIR!
%      \ \   /
%      "\ \ /"          - -
%      ||              hithesis v3          { ` . ! . ` }
%      ||              ',_ / Y \_, '
%      ||   ,          dustincys          { _ , _ }
%      \ \   ||   \ \      Email: yanshuoc@gmail.com          |
%      | |   | |   | |      https://yanshuo.name          ( \ |   / )
%      | |   | |   / /          \ |   //
%      \ \ | | / /      https://github.com/dustincys/hithesis    | //
%      ` \ \ / ^   \ \   \ . /   \ \ /   //   \ \ . /   \ \   //   \ \ | / /
%      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

\documentclass[fontset=fandol,toc=true,type=doctor,stage=opening,campus=shenzhen]{
hithesisart}

% 此处选项中不要有空格

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 必填选项
% type=doctor/master/bachelor
% stage=opening/midterm
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 选填选项（选填选项的缺省值已经尽可能满足了大多数需求，除非明确知道自己有什么
% 需求）
% campus=shenzhen/weihai/harbin
% 含义：校区选项，默认harbin
% fontset=windows/mac/ubuntu/fandol
% 含义：前三个对应各自系统，fandol是开源字体。
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

\graphicspath{{figures/}}

\begin{document}

\input{front/coverart.tex}

\makecover
```

```

% 深圳博士开题报告 -----
\input{body/report_shenzhen_doctor_opening}

% 威海校区本科生开题报告结构 -----
% \input{body/report_weihai_bachelor_opening}
% \makebackcover
% -----

% 威海校区本科生中期报告结构 -----
% \input{body/report_weihai_bachelor_midterm}
% \makebackcover
% -----

% 哈尔滨校区本科生开题报告结构 -----
% \input{body/report_harbin_bachelor_opening}
% -----

\end{document}

% Local Variables:
% TeX-engine: xetex
% End:

% !Mode:: "TeX:UTF-8"
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
%      ,
%      /\^/\
%      | \ / |          CONGRATULATIONS!
%      | | |          SPRING IS IN THE AIR!
%      \ \ /
%      '\ \ /'          _{ ' }_
%      ||              hithesis v3      { ` . ! . ` }
%      ||              ',_ / Y \_, '
%      || ,            dustincys        { _ , _ }
%      | \  ||  | \      Email: yanshuoc@gmail.com      |
%      | | || | |      https://yanshuo.name              ( \ | / )
%      | | || / /      \ | //
%      \ \ || / /      https://github.com/dustincys/hithesis  | //
%      ` \ \ / ^  \ \  \ . /  \ \ /  //  \ \ . /  \ \  //  \ \ | / /
%      ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\documentclass[fontset=fandol,type=doctor,stage=midterm,campus=shenzhen]{hithesisartplus}

\graphicspath{{figures/}}

\begin{document}

```

```

\input{front/coverart.tex}
\makecover

\input{body/report_shenzhen_doctor_midterm}

\end{document}

% Local Variables:
% TeX-engine: xetex
% End:

```

3.3 论文选项

论文选项，就是在 `main.tex` 文件的开头，非注释的第一行的方括号中填写的选项，示例见上节。各个选项的含义说明已经在上节中说明，所以这里就不重复了。

3.4 中文字体

正确配置中文字体是使用模板的第一步。模板调用 C_T_EX 宏包，只提供基于 `xeCJK` 包，使用 X_YL_AT_EX 编译的方式。关于如何使用字体命令、字号等等，属于模板格式范畴，在实现细节中讨论。关于中文字体安装、配置的所有问题不在本模板讨论范围。

3.5 前文

前文内容是正文之前，含封面、摘要、目录、符号表。封面信息提供两种配置方法：一是通过统一设置命令 `\hitsetup` 通过 `key=value` 形式完成；二是每个信息利用命令独立设置，其中命令的名字跟 `key` 相同。两种方式可以交叉使用，并按顺序执行（即后来的设置会覆盖前面的）。以 `c` 开头的命令跟中文相关，`e` 开头则为对应的英文。

`\hitsetup` 用法与常见 `key=value` 命令相同，如下：

`\hitsetup`

```

\hitsetup{
  key1 = value1,
  key2 = {a value, with comma},
}
% 可以多次调用
\hitsetup{
  key3 = value3,
  key1 = value11, % 覆盖 value1
}

```

注意：`\hitsetup` 使用 `kvoptions` 机制，所以配置项之间不能有空行，否则会报错。

大多数命令的使用方法都是：`\command{<arg>}`，例外者将具体指出。这些命令都在示例文档的 `front/cover.tex` 中。

3.5.1 密级

定义秘密级别和国内国际索引号。

statesecrets
natclassifiedindex
intclassifiedindex

```
\hitsetup{
statesecrets={公开},
natclassifiedindex={TM301.2},
intclassifiedindex={62-5},
}
```

3.5.2 论文标题

论文标题

中英文标题。如果有副标题，需要在封面选项中设置 subtitle=true，否则不显示副标题。

ctitle
etitle
ctitleone
ctitletwo
csubtitle
esubtitle

```
\hitsetup{
ctitlecover={封面中文题目可断行},
ctitle={论文中文题目},
etitle={Thesis English Title},
csubtitle={论文中文副题目（如果有）},
esubtitle={Thesis English Sub-Title (if necessary)},
ctitleone={本科生论文中文题目上部分},
ctitletwo={本科生论文中文题目下部分},
}
```

3.5.3 作者姓名

作者姓名

作者姓名。

cauthor
eauthor

```
\hitsetup{
cauthor={中文姓名},
eauthor={Name in Pinyin}
}
```

3.5.4 申请学位名称

学科名称

按照入学的培养计划中学科自行填写，具体学科名称不是本文档范畴。

cxueke
exueke

```
\hitsetup{
cxueke={工学},
exueke={Engineering},
}
```

3.5.5 院系名称

院系名称

院系名称，同上，按照入学的培养计划中学科自行填写，具体院系名称不是本文档范畴。

caffil
eaffil

```
\hitsetup{
caffil={机电工程学院},
}
```

```
eaaffil={\emultiline[t]{School of Mechatronics Engineering \\ Mechatronics Engineering}},
}
```

注意：个别学院英文名过长，使用以上方法自行换行。

3.5.6 专业名称

专业名称 专业名称，同上，按照入学的培养计划中学科自行填写，具体名称不是本文档范畴。

```
csubject
esubject
\hitsetup{
csubject={机械制造及其自动化},
esubject={Computer Science and Technology},
}
```

3.5.7 导师

导师 直接导师。

```
csupervisor
esupervisor
\hitsetup{
csupervisor={导师~教授},
esupervisor={Supervisor}
}
```

副导师 副指导教师。

```
cassosupervisor
eassosupervisor
\hitsetup{
cassosupervisor={副导师~副教授},
eassosupervisor={2nd Boss}
}
```

联合导师 硕士生联合指导教师，博士生联合导师。

```
ccosupervisor
ecosupervisor
\hitsetup{
ccosupervisor={联合导师~教授},
ecosupervisor={3rd Boss}
}
```

3.5.8 成文日期

日期 默认为当前时间，也可以自己指定。

```
cdate
edate
\hitsetup{
cdate={中文日期},
edate={English Date},
}
```

3.5.9 学生类型

学生类型

cstudenttype
estudenttype

非全日制教育申请学位者（同等学力人员）、（工程硕士）、（工商管理硕士）、（高级管理人员工商管理硕士）、（公共管理硕士）、（中职教师）、（高校教师）等，具体要求按照入学的培养计划中学科自行填写，具体名称不是本文档范畴。

```
\hitsetup{
  cstudenttype={同等学力人员},
  estudenttype={Master of Art},
}
```

3.5.10 学号

学号

cstudentid

学号，具体要求按照入学的培养计划中学科自行填写。

```
\hitsetup{
  cstudentid={9527},
}
```

3.5.11 摘要

摘要正文

cabstract
eabstract

说明：摘要正文只能用环境命令的形式，不支持 `\hitsetup`。

```
\begin{cabstract}
  摘要请写在这里...
\end{cabstract}

\begin{eabstract}
  Here comes the abstract in English...
\end{eabstract}
```

关键词

ckeywords
ekeywords

关键词用英文逗号分割写入相应的命令中，模板会解析各关键词并生成符合不同论文格式要求的关键词格式。

```
\hitsetup{
  ckeywords={关键词 1, 关键词 2},
  ekeywords={keyword 1, keyword 2}
}
```

3.5.12 符号对照表

denotation

主要符号表环境，单独在文件 `front/denotation.tex` 中。跟据《[哈尔滨工业大学研究生学位论文撰写规范](#)》示例中要求，我工符号表是 `table` 环境，示例文件如下，由于我工要求博士论文图表标题是双语，所以任何对单个标题的全局格式调整都会影响到双语标题，所以这里使用 `\vspace`，具体见实现细节中的描述。

```
\begin{denotation}
\begin{table}[h]%此处最好是h
```



```

\caption{国际单位制中具有专门名称的导出单位}
\vspace{0.5em}\centering\wuhao
\begin{tabular}{ccccc}
\toprule[1.5pt]
量的名称&单位名称&单位符号&其它表示实例\\
\midrule[1pt]
频率&赫[兹]&Hz&s-1\\
\bottomrule[1.5pt]
\end{tabular}
\end{table}
\end{denotation}

```

3.5.13 目录

目录不需要用户干预，自动生成，具体命令已经写在 `main.tex` 中。

3.6 正文

3.6.1 图和表

哈尔滨工业大学 博士毕业论文要求使用中英双语图题、表题，这增加了维护难度。因为现有唯一的方法是在已有的图题或表题的基础上再添加一行英语图题或表题。两个题之间的距离具体多少不在《哈尔滨工业大学研究生学位论文撰写规范》中要求。目前的方法是用户手动调节该距离。关于图题《哈尔滨工业大学研究生学位论文撰写规范》和《哈尔滨工业大学本科生毕业论文撰写规范》只规定了居中，并没有规定居中对其。然而评审老师很多喜欢居中且居中对齐。模板默认选项是居中且居中对齐，如果不喜欢居中对齐，那么需要在 `main.tex` 的文档类选项中设置选项 `capcenterlast=false`。详细方法见前文的介绍。《哈尔滨工业大学研究生学位论文撰写规范》，《哈尔滨工业大学本科生毕业论文撰写规范》规定：“每个图均应有图题（由图序和图名组成），图题不宜有标点符号，图名在图序之后空 1 个半角字符排写。图序按章编排，如第 1 章第一个插图的图号为“图 1-1”。图题置于图下，硕士论文只用中文，博士论文用中、英两种文字，居中书写，中文在上，要求中文用宋体 5 号字，英文用 Times New Roman 5 号字。有图注或其它说明时应置于图题之上。引用图应注明出处，在图题右上角加引用文献号。图中若有分图时，分图题置于分图之下或图题之下，可以只用中文书写，分图号用 a)、b) 等表示。图中各部分说明应采用中文（引用的外文图除外）或数字符号，各项文字说明置于图题之上（有分图时，置于分图题之上）。图中文字用宋体、Times New Roman 字体，字号尽量采用 5 号字（当字数较多时可用小 5 号字，以清晰表达为原则，但在一个插图内字号要统一）。同一图内使用文字应统一。图表中物理量、符号用斜体。”单双语图题的方法如下，注释中说明。

```

\begin{figure}[htpb]
\centering
\includegraphics[width = 0.4\textwidth]{golfer}
\bicaption[golfer1]{}{注意图中文字尽量用五号字}
}{Fig.$\!$!$}{The person playing golf}
\end{figure}

```

单张单图题的格式如下，

```
\begin{figure}[h]
\centering
\includegraphics[width = 0.4\textwidth]{golfer}
\caption{注意图中文字字号尽量用五号字}
\end{figure}
```

并列图例。

```
\begin{figure}[htbp]
\centering
\begin{minipage}{0.4\textwidth}
\centering
\includegraphics[width=\textwidth]{golfer}
\bicaption[golfer2]{}{打高尔夫球的人}{Fig.$\!$}{The person playing golf}
\end{minipage}
\begin{minipage}{0.4\textwidth}
\centering
\includegraphics[width=\textwidth]{golfer}
\bicaption[golfer3]{}{打高尔夫球的人}{Fig.$\!$}{The person playing golf}
\end{minipage}
\end{figure}
```

子图图例。

```
\begin{figure}[htbp]
\centering
\subfigure{\label{golfer41}}\addtocounter{subfigure}{-2}
\subfigure[The person playing golf]{\subfigure[打高尔夫球的人~1]{\includegraphics[width=0.4\textwidth]{golfer}}}}
\subfigure{\label{golfer42}}\addtocounter{subfigure}{-2}
\subfigure[The person playing golf]{\subfigure[打高尔夫球的人~2]{\includegraphics[width=0.4\textwidth]{golfer}}}}
\bicaption[golfer4]{}{打高尔夫球的人}{Fig.$\!$}{The person playing golf}
\end{figure}
```

表格示例，表格中的字体是可以自行调整的。

```
\begin{table}[htbp]
\bicaption[table1]{}{符合研究生院绘图规范的表格}{Table$\!$}{Table in agreement of the
standard from graduate school}
\vspace{0.5em}\centering\wuhao
\begin{tabular}{ccccc}
\toprule[1.5pt]
 $D(\text{in})$  &  $P_u(\text{lbs})$  &  $u_u(\text{in})$  &  $\beta$  &  $G_f(\text{psi.in})$  \\
\midrule[1pt]
5 & 269.8 & 0.000674 & 1.79 & 0.04089 \\
10 & 421.0 & 0.001035 & 3.59 & 0.04089 \\
20 & 640.2 & 0.001565 & 7.18 & 0.04089
\end{tabular}
```

```
\bottomrule[1.5pt]
\end{tabular}
\end{table}
```

因为长表格不是浮动体，不会自动调整位置、也不会自动调整字体大小，一切都要手动设置。特别繁琐。

```
\ltfontsize{\dauw[1.667]} %设置表格内字体行间距
\dauw[1.667]\begin{longtable}{ccc} % 注意此处设置的是表格线距离
\longbionenumcaption{{}\wuhao 中国省级行政单位一览 %此处要添加字体设置
}\label{table2}}{Table$\!$}}{\wuhao Overview of the provincial administrative
unit of China}}{-0.5em}{3.15bp}\\ %注意后两个参数分别是中英标题间距、标题和表格的间距。
%\caption{\wuhao 中国省级行政单位一览}\\[1em] %注意此处是标题和表格间距，这行
%是单语标题
\toprule[1.5pt] 名称 & 简称 & 省会或首府 \\ \midrule[1pt]
\endfirsthead
\multicolumn{3}{r}{表~\thetable (续表)}\vspace{0.5em}\\
\toprule[1.5pt] 名称 & 简称 & 省会或首府 \\ \midrule[1pt]
\endhead
\bottomrule[1.5pt]
\endfoot
北京市 & 京 & 北京\\
天津市 & 津 & 天津\\
河北省 & 冀 & 石家庄市\\
山西省 & 晋 & 太原市\\
内蒙古自治区 & 蒙 & 呼和浩特市\\
辽宁省 & 辽 & 沈阳市\\
吉林省 & 吉 & 长春市\\
黑龙江省 & 黑 & 哈尔滨市\\
上海市 & 沪/申 & 上海\\
江苏省 & 苏 & 南京市\\
浙江省 & 浙 & 杭州市\\
安徽省 & 皖 & 合肥市\\
福建省 & 闽 & 福州市\\
江西省 & 赣 & 南昌市\\
山东省 & 鲁 & 济南市\\
河南省 & 豫 & 郑州市\\
湖北省 & 鄂 & 武汉市\\
湖南省 & 湘 & 长沙市\\
广东省 & 粤 & 广州市\\
广西壮族自治区 & 桂 & 南宁市\\
海南省 & 琼 & 海口市\\
重庆市 & 渝 & 重庆\\
四川省 & 川/蜀 & 成都市\\
贵州省 & 黔/贵 & 贵阳市\\
云南省 & 云/滇 & 昆明市\\
西藏自治区 & 藏 & 拉萨市\\
```

```

陕西省 & 陕/秦 & 西安市\\
甘肃省 & 甘/陇 & 兰州市\\
青海省 & 青 & 西宁市\\
宁夏回族自治区 & 宁 & 银川市\\
新疆维吾尔自治区 & 新 & 乌鲁木齐市\\
香港特别行政区 & 港 & 香港\\
澳门特别行政区 & 澳 & 澳门\\
台湾省 & 台 & 台北市\\
\end{longtable}\normalsize %注意这里要恢复正常字体

```

3.6.2 公式

公式不做介绍，与正常用法一致。

3.6.3 数学环境

hiThesis 定义了常用的数学环境：

axiom	theorem	definition	proposition	lemma	conjecture	
公理	定理	定义	命题	引理	猜想	
proof	corollary	example	exercise	assumption	remark	problem
证明	推论	例子	练习	假设	注释	问题

比如：

```

\begin{definition}
道千乘之国，敬事而信，节用而爱人，使民以时。
\end{definition}

```

产生（自动编号）：

定义 1.1 道千乘之国，敬事而信，节用而爱人，使民以时。

列举出来的数学环境毕竟是有限的，如果想用胡说这样的数学环境，那么可以定义：

```
\newtheorem{nonsense}{胡说}[chapter]
```

然后这样使用：

```

\begin{nonsense}
契丹武士要来中原夺武林秘笈。—— 慕容博
\end{nonsense}

```

产生（自动编号）：

胡说 1.1 契丹武士要来中原夺武林秘笈。—— 慕容博

3.6.4 算法

我工算法不在规范中要求且一千个评审老师有一千个算法格式喜好。详见 [PlutoThesis](#) 中的各个实验室算法喜好举例。在此多说无益。

3.6.5 引用参考文献

`\inlinecite`

学校要求的参考文献引用有两种模式：(1) 上标模式。比如“同样的工作有很多^[1,2]...”。(2) 正文模式。比如“文 [3] 中详细说明了...”。其中上标模式使用远比正文模式频繁，所以为了符合使用习惯，上标模式仍然用常规的 `\cite{key}`，而 `\inlinecite{key}` 则用来生成正文模式。

关于参考文献模板推荐使用 \LaTeX ，关于中文参考文献需要额外增加一个 `Entry: language`，将其设置为 `zh` 用来指示此参考文献为中文，以便 `hithesis.bst` 处理。如：

```
@INPROCEEDINGS{cnproceed,
  author   = {王重阳 and 黄药师 and 欧阳峰 and 洪七公 and 段皇帝},
  title    = {武林高手从入门到精通},
  booktitle = {第~$N$~次华山论剑},
  year     = 2006,
  address  = {西安, 中国},
  month    = sep,
  language = "zh",
}

@ARTICLE{cnarticle,
  AUTHOR = "贾宝玉 and 林黛玉 and 薛宝钗 and 贾探春",
  TITLE  = "论刘姥姥食量大如牛之现实意义",
  JOURNAL = "红楼梦杂谈",
  PAGES  = "260--266",
  VOLUME = "224",
  YEAR   = "1800",
  LANGUAGE = "zh",
}
```

注意如果不需要引用参考文献，请删除 `main.tex` 中 `\bibliography` 开头的两行，以避免可能的编译错误。

3.6.6 列表环境

`itemize`
`enumerate`
`description`

为了适合中文习惯，模板将这三个常用的列表环境用 `enumitem` 进行了纵向间距压缩。一方面清除了多余空间，另一方面用户可以自己指定列表环境的样式（如标签符号，缩进等）。细节请参看 `enumitem` 文档，此处不再赘述。

3.7 后文

3.7.1 结论

`conclusion`

结论之后为后文内容。

```
\begin{conclusions}
```

学位论文的结论作为论文正文的最后一章单独排写，但不加章标题序号。

结论应是作者在学位论文研究过程中所取得的创新性成果的概要总结，不能与摘要混为一谈。博士学位论文结论应包括论文的主要结果、创新点、展望三部分，在结论中应概括论文的核心观点，明确、客观地指出本研究内容的创新性成果（含新见解、新观点、方法创新、技术创新、理论创新），并指出今后进一步在本研究方向进行研究工作的展望与设想。对所取得的创新性成果应注意从定性和定量两方面给出科学、准确的评价，分（1）、（2）、（3）…条列出，宜用“提出了”、“建立了”等词叙述。

```
\end{conclusions}
```

3.7.2 参考文献

在后文中的参考文献是自动生成的，不需要用户干预，具体命令在 `main.tex` 中有示例。

3.7.3 附录

appendix

所有的附录都插到这里来。因为附录会更改默认的 `chapter` 属性，而后面的个人简历又需要恢复，所以实现为环境可以保证全局的属性不受影响。

```
\begin{appendix}
\input{back/appA.tex}
\end{appendix}
```

3.7.4 所发表文章

publication

虽然在《哈尔滨工业大学研究生学位论文撰写规范》《哈尔滨工业大学本科生毕业论文撰写规范》中都没有明确规定此处的格式，但按照旧模板 `PlutoThesis`，此处格式非常复杂。此处仍然使用旧模板中的设置方法。

```
\begin{publication}
\noindent\textbf{(一) 发表的学术论文}
\begin{publist}
\item XXX, XXX. Static Oxidation Model of Al-Mg/C Dissipation Thermal Protection Materials[J]. Rare Metal Materials and Engineering, 2010, 39(Suppl. 1): 520-524. (SCI~收录, IDS号为~669 JS, IF=0.16)
\item XXX, XXX. 精密超声振动切削单晶铜的计算机仿真研究[J]. 系统仿真学报, 2007, 19 (4) : 738-741, 753. (EI~收录号: 20071310514841)
\item XXX, XXX. 局部多孔质气体静压轴向轴承静态特性的数值求解[J]. 摩擦学学报, 2007 (1) : 68-72. (EI~收录号: 20071510544816)
\item XXX, XXX. 硬脆光学晶体材料超精密切削理论研究综述[J]. 机械工程学报, 2003, 39 (8) : 15-22. (EI~收录号: 2004088028875)
\item XXX, XXX. 基于遗传算法的超精密切削加工表面粗糙度预测模型的参数辨识以及切削参数优化[J]. 机械工程学报, 2005, 41 (11) : 158-162. (EI~收录号: 2006039650087)
\item XXX, XXX. Discrete Sliding Mode Control with Fuzzy Adaptive Reaching Law on 6-PEES Parallel Robot[C]. Intelligent System Design and Applications, Jinan, 2006: 649-652. (EI~收录号: 20073210746529)
\end{publist}
```

```

\noindent\textbf{(二) 申请及已获得的专利 (无专利时此项不必列出) }
\begin{publist}
\item XXX, XXX. 一种温热外敷药制备方案: 中国, 88105607.3[P]. 1989-07-26.
\end{publist}

\noindent\textbf{(三) 参与的科研项目及获奖情况}
\begin{publist}
\item XXX, XXX. XX~气体静压轴承技术研究, XX~省自然科学基金项目. 课题编号: XXXX.
\item XXX, XXX. XX~静载下预应力混凝土房屋结构设计统一理论. 黑江省科学技术二等奖, 2007.
\end{publist}
%\vfill
%\hangafter=1\hangindent=2em\noindent
%\setlength{\parindent}{2em}
\end{publication}

```

3.7.5 索引

ceindex

我工要求中英文双语索引。后文中的自动索引实际上不需要用户干预。

```

\begin{ceindex}
%如果想要手动加索引, 注释掉以下这一样, 用wordlist环境
\printsubindex*
\end{ceindex}

```

手工添加索引的方法不推荐, 模板中将去除该功能。

3.7.6 授权

授权页中的签名和日期是需要手写, 不需要人工干预。具体示例在 `main.tex` 中。

\authorization

```

\authorization %授权
%\authorization[saomiao.pdf] %添加扫描页的命令, 与上互斥

```

3.7.7 致谢声明

acknowledgement

把致谢做成一个环境更好一些, 直接往里面写感谢的话就可以啦!

```

\begin{acknowledgement}
...
感谢\hit\LaTeX\ 论文模板\hithesis\ !
\end{acknowledgement}

```

3.7.8 简历

resume

个人简历。实际上, 致谢和个人简历是自由发挥的地区, 字体, 文体, 格式, 内容, 完全自己决定。

```
\begin{resume}
XXXX~年~XX~月~XX~日出生于~XXXX。

XXXX~年~XX~月考入~XX~大学~XX~院（系）XX~专业，XXXX~年~XX~月本科毕业并获得~XX~学学士学位。

XXXX~年~XX~月-----XXXX~年~XX~月在~XX~大学~XX~院（系）XX~学科学习并获得~XX~学硕士学位。

XXXX~年~XX~月-----XXXX~年~XX~月在~XX~大学~XX~院（系）XX~学科学习并获得~XX~学博士学位。

获奖情况：如获三好学生、优秀团干部、X~奖学金等（不含科研学术获奖）。

工作经历：
\end{resume}
```

3.8 其它

模板的配置文件 `hihesisbook.cfg` 中定义了很多固定词汇，一般无须修改。如果有特殊需求，推荐在导言区使用 `\renewcommand`。

3.9 捐助

各位刀客和大侠如用的嗨，要解囊相助，请支付宝赞助参照图1中提示操作（二维码被矢量化后之后去除了头像等冗余无用的部分~）。



图 1: 支付宝

4 实现细节

4.1 基本信息

```

1 <(*bst)
2 ENTRY                                     % class Entry {
3 {                                         % public:
4   author                                %   String author;
5   editor                                %   String editor;
6   translator                            %   String translator;
7   title                                 %   String title;
8   edition                               %   String edition;
9   address                               %   String address;
10  publisher                             %   String publisher;
11  pages                                 %   String pages;
12  year                                  %   String year;
13  date                                  %   String date;
14  modifydate                            %   String modifydate;
15  citedate                              %   String citedate;
16  url                                   %   String url;
17  doi                                   %   String doi;
18  language                              %   String language;
19  booktitle                             %   String booktitle;
20  journal                               %   String journal;
21  chapter                               %   String chapter;
22  series                                %   String series;
23  volume                                %   String volume;
24  number                                %   String number;
25  version      %   String version;
26  month                                                %   String month;
27  school                                                %   String school;
28  institution                                           %   String institution;
29  organization                                           %   String organization;
30  type                                                    %   String type;
31  howpublished                                           %   String howpublished;
32  eid                                                    %   String eid;
33  key                                                    %   String key;
34  country                                                %   String country;
35  patentid                                               %   String patentid;
36  media                                                  %   String media;
37 } {                                                    %   // declare integer variables
38  required                                                %   int required; // withther the bibfield is requir
39 } {                                                    %   // declare String variables
40  label                                                  %   String label;      // label for the entry
41  mark                                                  %   String mark;      // mark for the entry
42                                                    %   // there is ahidden entry variable sort.key$

```

```

43                                     % String sort_key;
44 }                                     % }
45                                     %
46 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
47                                     %
48 INTEGERS {                           % // declare global int variables
49     entry.count                       % static int entry_count;           // number of entries
50     longest.label.width               % static int longest_label_width; // width of the longest label
51     i                                 % static int i;
52     j                                 % static int j;
53     k                                 % static int k;
54 }                                     %
55                                     %
56 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
57                                     %
58 STRINGS {                            % // declare global String variables
59     longest.label                     % static String longest_label;    // the longest label
60     s                                 % static String s;
61     t                                 % static String t;
62 }                                     %
63                                     %
64 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
65
66 % define global static constants
67 FUNCTION {true} {#1}
68 FUNCTION {false} {#0}
69 FUNCTION {debug.enabled} {true}
70 FUNCTION {cap.volume.en} {"Vol~"}
71 FUNCTION {cap.volume.zh} {" 卷"}
72 FUNCTION {cap.edition.en} {"~ed"}
73 FUNCTION {cap.edition.zh} {" 版"}
74 FUNCTION {cap.anonymous.en} {"Anon"}
75 FUNCTION {cap.anonymous.zh} {" 佚名"}
76 FUNCTION {cap.no.address.en} {"[S.l.]}
77 FUNCTION {cap.no.address.zh} {"[出版地不详]"}
78 FUNCTION {cap.no.publisher.en} {"[s.n.]}
79 FUNCTION {cap.no.publisher.zh} {"[出版者不详]"}
80 FUNCTION {cap.et.al.en} {"", et~al"}
81 FUNCTION {cap.et.al.zh} {"", 等"}
82 FUNCTION {cap.translate.en} {"~trans"}
83 FUNCTION {cap.translate.zh} {" 译"}
84 FUNCTION {cap.doi.url} {"http://dx.doi.org/"}
85 FUNCTION {cap.st.en} {"st"}
86 FUNCTION {cap.nd.en} {"nd"}
87 FUNCTION {cap.rd.en} {"rd"}
88 FUNCTION {cap.th.en} {"th"}

```

```

89
90 FUNCTION {cap.space}      {" "}
91 FUNCTION {cap.period}    {"\@. "}
92 FUNCTION {cap.comma}     {"\@, "}
93 FUNCTION {cap.colon}     {"\thinspace{}\textnormal{:} "}
94 FUNCTION {cap.double.slash} {" /\thinspace{}"}
95 FUNCTION {cap.dash}      {"\textnormal{-}"}
96
97 % Predefined latex command used to format the style of bibitems
98 FUNCTION {env.bibbegin}  {"\begin{thebibliography}" }
99 FUNCTION {env.bibend}    {"\end{thebibliography}" }
100 FUNCTION {cmd.bibauthor} {"\providecommand{\bibauthor}[1]{#1}" }
101 FUNCTION {cmd.bibeditor} {"\providecommand{\bibeditor}[1]{#1}" }
102 FUNCTION {cmd.bibtranslator} {"\providecommand{\bibtranslator}[1]{#1}" }
103 FUNCTION {cmd.bibtitle} {"\providecommand{\bibtitle}[1]{#1}" }
104 FUNCTION {cmd.bibbooktitle} {"\providecommand{\bibbooktitle}[1]{#1}" }
105 FUNCTION {cmd.bibjournal} {"\providecommand{\bibjournal}[1]{#1}" }
106 FUNCTION {cmd.bibmark} {"\providecommand{\bibmark}[1]{\mbox{#1}}" }
107 FUNCTION {cmd.bibcountry} {"\providecommand{\bibcountry}[1]{#1}" }
108 FUNCTION {cmd.bibpatentid} {"\providecommand{\bibpatentid}[1]{#1}" }
109 FUNCTION {cmd.bibedition} {"\providecommand{\bibedition}[1]{#1}" }
110 FUNCTION {cmd.biborganization} {"\providecommand{\biborganization}[1]{#1}" }
111 FUNCTION {cmd.bibaddress} {"\providecommand{\bibaddress}[1]{#1}" }
112 FUNCTION {cmd.bibpublisher} {"\providecommand{\bibpublisher}[1]{#1}" }
113 FUNCTION {cmd.bibinstitution} {"\providecommand{\bibinstitution}[1]{#1}" }
114 FUNCTION {cmd.bibschooll} {"\providecommand{\bibschooll}[1]{#1}" }
115 FUNCTION {cmd.bibvolume} {"\providecommand{\bibvolume}[1]{#1}" }
116 FUNCTION {cmd.bibnumber} {"\providecommand{\bibnumber}[1]{#1}" }
117 FUNCTION {cmd.bibversion} {"\providecommand{\bibversion}[1]{#1}" }
118 FUNCTION {cmd.bibpages} {"\providecommand{\bibpages}[1]{#1}" }
119 FUNCTION {cmd.bibmodifydate} {"\providecommand{\bibmodifydate}[1]{#1}" }
120 FUNCTION {cmd.bibcitedate} {"\providecommand{\bibcitedate}[1]{#1}" }
121 FUNCTION {cmd.bibyear} {"\providecommand{\bibyear}[1]{#1}" }
122 FUNCTION {cmd.bibdate} {"\providecommand{\bibdate}[1]{#1}" }
123 FUNCTION {cmd.biburl} {"\providecommand{\biburl}[1]{\newline\url{#1}}" }
124
125 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
126
127 FUNCTION {log.str} {
128     debug.enabled {
129         "DEBUG: " swap$ * " - '" *
130         swap$ *
131         "' *
132         top$
133     } {
134         pop$ pop$
135     }
136 }
137
138 % void Entry::log_str(String value, String message)
139 % if (debug_enabled == 1) {
140 %     message = "DEBUG: " + message + " - '"';
141 %     message = message + value;
142 %     message = message + "'";
143 %     log(message);
144 % } else {
145 %     return;
146 % }

```

```

135 } if$ % }
136 } % }
137 %
138 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
139 %
140 FUNCTION {log.int} { % int Entry::log_int(int value, String message)
141   debug.enabled { % if (debug_enabled == 1) {
142     "DEBUG: " swap$ * " - " * % message = "DEBUG: " + message + " - ";
143     swap$ int.to.str$ * % message = message + int_to_str(value);
144     top$ % log(message);
145   } { % } else {
146     pop$ pop$ % return;
147   } if$ % }
148 } % }
149 %
150 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
151 %
152 FUNCTION {not} { % int Entry::not(int x) {
153   { % if (x == 1) {
154     false % return false;
155   } { % } else {
156     true % return true;
157   } if$ % }
158 } % }
159 %
160 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
161 %
162 FUNCTION {and} { % int Entry::and(int x, int y) {
163   { % if (y == 1) {
164     skip$ % return x;
165   } { % } else {
166     pop$ false % return false;
167   } if$ % }
168 } % }
169 %
170 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
171 %
172 FUNCTION {or} { % int Entry::or(int x, int y) {
173   { % if (y == 1) {
174     pop$ true % return true;
175   } { % } else {
176     skip$ % return x;
177   } if$ % }
178 } % }
179 %
180 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

```

181                                     % // calculate the length in characters of a string
182                                     % // We need this function since text.length$ is NOT
183                                     % // the length in characters.
184 INTEGERS {length.i}                                     % static int length_i;
185 FUNCTION {length} {                                     % int Entry::length(String str) {
186     duplicate$ empty$ {                                 %   if (empty(str)) {
187         pop$ #0                                         %       return 0;
188     } {                                                 %   } else {
189         #1 'length.i :=                                %       length_i = 1;
190         false                                           %       int stop = false;
191         {not} {                                         %       while (! stop) {
192             duplicate$ length.i #1 substring$          %           String tmp = substring(str, length_i, 1);
193             "" = {                                       %           if (tmp == "") {
194                 true                                    %               stop = true;
195             } {                                         %           } else {
196                 length.i #1 + 'length.i :=             %               length_i = length_i + 1;
197                 false                                   %               stop = false;
198             } if$                                       %           }
199         } while$                                       %       }
200     pop$ length.i #1 -                                 %       return length_i - 1;
201 } if$                                                  %   }
202 }                                                       % }
203                                                         %
204 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
205                                                         %
206 FUNCTION {is.digit} {                                  % int Entry::is_digit(String ch) {
207     chr.to.int$                                         %   int ascii = chr_to_int(ch);
208     duplicate$ "0" chr.to.int$ < {                     %   if (ascii < chr_to_int("0")) {
209         pop$ false                                     %       return false;
210     } {                                                 %   } else {
211         "9" chr.to.int$ > {                             %       if (ascii > chr_to_int("9")) {
212             false                                      %           return false;
213         } {                                           %       } else {
214             true                                       %           return true;
215         } if$                                         %       }
216     } if$                                             %   }
217 }                                                       % }
218                                                         %
219 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
220                                                         % // test if str is a number
221 FUNCTION {is.number} {                                  % int Entry::is_number(String str) {
222     duplicate$ empty$ not swap$                        %   int result = (! empty(str));
223     { duplicate$ empty$ not} {                          %   while (! empty(str)) {
224         duplicate$ #1 #1 substring$ is.digit {        %       if (is_digit(substring(str, 1, 1))) {
225             #2 global.max$ substring$                 %           str = substring(str, 2, global_max);
226         } {                                           %       } else {

```

```

227     pop$ pop$ false                                %      result = false;
228     ""                                              %      str = "";
229   } if$                                           %    }
230 } while$                                           %  }
231 pop$                                              %  return result;
232 }                                                  % }
233                                                  %
234 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
235                                                  % // extract the number prefix of str
236 FUNCTION {extract.number} {                      % String Entry::extract_number(String str) {
237   duplicate$                                       %   String suffix = str;
238   duplicate$ length swap$                         %   int n = length(str);
239   duplicate$ empty$                               %   int stop = empty(suffix);
240   { not } {                                        %   while (! stop) {
241     duplicate$ #1 #1 substring$ is.digit {       %     if (is_digit(substring(suffix, 1, 1))) {
242       #2 global.max$ substring$                  %       suffix = substring(suffix, 2, global_max);
243       duplicate$ empty$                         %       stop = empty(suffix);
244     } {                                           %     } else {
245       true                                       %       stop = true;
246     } if$                                       %   }
247 } while$                                           % }
248 length -                                         %   int n = n - length(suffix);
249 #1 swap$ substring$                             %   return substring(str, 1, n);
250 }                                                  % }
251                                                  %
252 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
253                                                  %
254 FUNCTION {get.last.chr} {                        % String Entry::get_last_chr(String str) {
255   duplicate$ length                             %   int n = length(str);
256   duplicate$ #0 = {                              %   if (n == 0) {
257     pop$                                         %     return str;
258   } {                                           %   } else {
259     #1 substring$                              %     return substring(str, n, 1);
260   } if$                                       %   }
261 }                                                  % }
262                                                  %
263 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
264                                                  %
265 FUNCTION {get.ordinal.suffix.en} {              % String Entry::get_ordinal_suffix_en(String ch) {
266   duplicate$ "1" = {                             %   if (num == "1") {
267     pop$ cap.st.en                             %     return cap_st_en;
268   } {                                           %   } else {
269     duplicate$ "2" = {                         %     if (num == "2") {
270       pop$ cap.nd.en                           %       return cap_nd_en;
271     } {                                           %     } else {
272       duplicate$ "3" = {                       %       if (num == "3") {

```

```

273      pop$ cap.rd.en      %      return cap_rd_en;
274    } {                  %      } else {
275      pop$ cap.th.en      %      return cap_th_en;
276    } if$                 %      }
277  } if$                   %    }
278 } if$                   %  }
279 }                         % }
280                          %
281 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
282                          %
283 FUNCTION {num.to.ordinal.en} { % String Entry::num_to_ordinal_en(String num) {
284   duplicate$ empty$ { %   if (empty(num)) {
285     skip$ %     return num;
286   } { %   } else {
287     duplicate$ get.last.chr %     String ch = get_last_chr(num);
288     get.ordinal.suffix.en %     String str = get_ordinal_suffix_en(ch);
289     * %     reutrn num + str;
290   } if$ %   }
291 } % }
292 %
293 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
294 %
295 STRINGS {remove.dots.result} % static String remove_dots_result;
296 %
297 FUNCTION {remove.dots} { % String Entry::remove_dots(String str) {
298   "" 'remove.dots.result := %   remove_dots_result = "";
299   { duplicate$ empty$ not } { %   while (! empty(str)) {
300     duplicate$ #1 #2 substring$ %     String tmp = substring(str, 1, 2);
301     "\" = { %     if (tmp == "\".) {
302       #3 global.max$ substring$ %       str = substring(str, 3, global_max);
303     } { %     } else {
304       duplicate$ #1 #1 substring$ %       tmp = substring(str, 1, 1);
305       duplicate$ "." = { %       if (tmp == ".") {
306         pop$ #2 global.max$ substring$ %         str = substring(str, 2, global_max);
307       } { %       } else {
308         remove.dots.result swap$ * %         tmp = remove_dots_result + tmp;
309         'remove.dots.result := %         remove_dots_result = tmp;
310         #2 global.max$ substring$ %         str = substring(str, 2, global_max);
311       } if$ %       }
312     } if$ %     }
313   } while$ %   }
314   pop$ remove.dots.result %   return remove_dots_result;
315 } % }
316 %
317 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
318 %

```

```

319 FUNCTION {add.brace} {                                % String Entry::add_brace(String str) {
320   "{" swap$ * "}" *                                   %   return "{" + str + "}";
321 }                                                       % }
322                                                       %
323 %%%%%%%%%%%%%%%
324                                                       %
325 FUNCTION {add.bracket} {                                % String Entry::bracket(String str) {
326   "(" swap$ * ")" *                                   %   return "(" + str + ")";
327 }                                                       % }
328                                                       %
329 %%%%%%%%%%%%%%%
330                                                       %
331 FUNCTION {add.squarebracket} {                          % String Entry::add_squarebracket(String str) {
332   "[" swap$ * "]" *                                   %   return "[" + str + "]";
333 }                                                       % }
334                                                       %
335 %%%%%%%%%%%%%%%
336                                                       %
337 FUNCTION {add.textit} {                                  % String Entry::add_textit(String str) {
338   "\textit{" swap$ * "}" *                           %   return "\textit{" + str + "}";
339 }                                                       % }
340                                                       %
341 %%%%%%%%%%%%%%%
342                                                       %
343 FUNCTION {add.textbf} {                                  % String Entry::add_textbf(String str) {
344   "\textbf{" swap$ * "}" *                           %   return "\textbf{" + str + "}";
345 }                                                       % }
346                                                       %
347 %%%%%%%%%%%%%%%
348                                                       % // test if str contains a dash '-'
349 FUNCTION {contain.dash} {                                % int Entry::contain_dash(String str) {
350   false swap$                                           %   int result = false;
351   { duplicate$ empty$ not} {                            %   while (! empty(str)) {
352     duplicate$ #1 #1 substring$ "-" = {                 %     if (substring(str, 1, 1) == "-") {
353       pop$ pop$ true                                    %       result = true;
354       ""                                                %       str = "";
355     } {                                                 %     } else {
356       #2 global.max$ substring$                        %       str = substring(str, 2, global_max);
357     } if$                                              %     }
358   } while$                                           %   }
359   pop$                                               %   return result;
360 }                                                       % }
361                                                       %
362 %%%%%%%%%%%%%%%
363                                                       % // extract the substring before the first '-'
364                                                       % // returns the string itself if no '-'

```



```

365 FUNCTION {extract.before.first.dash} { % String Entry::extract_before_first_dash(String str)
366   duplicate$ % String suffix = str;
367   duplicate$ length swap$ % int n = length(str);
368   duplicate$ empty$ % int stop = empty(suffix);
369   { not } { % while (! stop) {
370     duplicate$ #1 #1 substring$ "-" = { % if (substring(suffix, 1, 1) == "-") {
371       true % stop = true;
372     } { % } else {4r
373       #2 global.max$ substring$ % suffix = substring(suffix, 2, global_max);
374       duplicate$ empty$ % stop = empty(suffix);
375     } if$ % }
376   } while$ % }
377   length - % int n = n - length(suffix);
378   #1 swap$ substring$ % return substring(str, 1, n);
379 } % }
380 %
381 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
382 % // extract the substring after the first '-'
383 % // returns the string itself if no '-'
384 FUNCTION {extract.after.first.dash} { % String Entry::extract_after_first_dash(String str)
385   duplicate$ % String suffix = str;
386   duplicate$ empty$ % int stop = empty(suffix);
387   { not } { % while (! stop) {
388     duplicate$ #1 #1 substring$ "-" = { % if (substring(suffix, 1, 1) == "-") {
389       true % stop = true;
390     } { % } else {4r
391       #2 global.max$ substring$ % suffix = substring(suffix, 2, global_max);
392       duplicate$ empty$ % stop = empty(suffix);
393     } if$ % }
394   } while$ % }
395   duplicate$ empty$ { % if (empty(suffix)) {
396     pop$ % return str;
397   } { % } else {
398     swap$ pop$ #2 global.max$ substring$ % return substring(suffix, 2, global_max);
399   } if$ % }
400 } % }
401 %
402 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
403 % // extract the substring after the last '-'
404 % // returns the empty string if no '-'
405 FUNCTION {extract.after.last.dash} { % String Entry::extract_after_last_dash(String str)
406   duplicate$ contain.dash not { % if (! contain_dash(str)) {
407     pop$ "" % return "";
408   } { % } else {
409     {duplicate$ contain.dash} { % while (contain_dash(str)) {
410       extract.after.first.dash % str = extract_after_first_dash(str);

```

```

411     } while$                                %     }
412                                           %     return str;
413 } if$                                       % }
414 }                                           % }
415                                           %
416 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
417                                           %
418 FUNCTION {trim.start} {                    % String Entry::trim_start(String str) {
419   {duplicate$ #1 #1 substring$ " " =} {    %   while (substring(str, 1, 1) == " ") {
420     #2 global.max$ substring$              %     str = substring(str, 2, global_max);
421   } while$                                %   }
422                                           %   return str;
423 }                                           % }
424                                           %
425 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
426                                           %
427 FUNCTION {trim.end} {                      % String Entry::trim_end(String str) {
428   {duplicate$ get.last.chr " " =} {        %   while (get_last_chr(str) == " ") {
429     duplicate$ length #1 -                %     int n = length(str) - 1;
430     #1 swap$ substring$                   %     str = substring(str, 1, n);
431   } while$                                %   }
432                                           %   return str;
433 }                                           % }
434                                           %
435 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
436                                           %
437 FUNCTION {trim} {                          % String Entry::trim(String str) {
438   trim.start                              %   str = trim_start(str);
439   trim.end                                %   return trim_end(str);
440 }                                           % }
441                                           %
442 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
443                                           %
444 FUNCTION {start.bibitem} {                  % void Entry::start_bibitem() {
445   newline$                                %   writeln();
446   "\bibitem{" cite$ * "}" * write$        %   write("\bibitem{" + this.cite + "}");
447   newline$                                %   writeln();
448 }                                           % }
449                                           %
450 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
451                                           %
452 FUNCTION {end.bibitem} {                    % void Entry::end_bibitem() {
453   cap.period write$                       %   write(cap_period);
454   newline$                                %   writeln();
455 }                                           % }
456                                           %

```

```

457 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
458                                     %
459 FUNCTION {is.in.chinese} {          % int Entry::is_in_chinese() {
460     language empty$ {               %   if (empty(this.language)) {
461         false                       %       return false;
462     } {                              %   } else {
463         language "zh" = {           %       if (this.language == "zh") {
464             true                    %           return true;
465         } {                          %       } else {
466             false                   %           return false;
467         } if$                       %       }
468     } if$                           %   }
469 }                                   % }
470                                     %
471 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
472                                     %
473 FUNCTION {is.online} {              % int Entry::is_online() {
474     url empty$ not {                 %   if (! empty(this.url)) {
475         true                         %       return true;
476     } {                              %   } else {
477         doi empty$ not {             %       if (! empty(this.doi)) {
478             true                     %           return true;
479         } {                          %       } else {
480             false                   %           return false;
481         } if$                       %       }
482     } if$                           %   }
483 }                                   % }
484                                     %
485 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
486                                     %
487 FUNCTION {set.mark} {                % void Entry::set_mark(String mark) {
488     'mark :=                         %   this.mark = mark;
489     is.online {                     %   if (is_online()) {
490         mark "/OL" * 'mark :=        %       this.mark = this.mark + "/OL";
491     } {                              %   } else {
492         media empty$ not {           %       if (! empty(this.media)) {
493             mark "/" * media * 'mark := %           this.mark = this.mark + "/" + this.media;
494         } 'skip$ if$                 %       }
495     } if$                           %   }
496 }                                   % }
497                                     %
498 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
499                                     %
500 FUNCTION {cap.volume} {              % String Entry::cap_volume() {
501     is.in.chinese {                 %   if (is_in_chinese()) {
502         cap.volume.zh                %       return cap_volume_zh;

```

```

503 } { % } else {
504     cap.volume.en % return cap_volume_en;
505 } if$ % }
506 } % }
507 %
508 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
509 %
510 FUNCTION {cap.edition} { % String Entry::cap_edition() {
511     is.in.chinese { % if (is_in_chinese()) {
512         cap.edition.zh % return cap_edition_zh;
513     } { % } else {
514         cap.edition.en % return cap_edition_en;
515     } if$ % }
516 } % }
517 %
518 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
519 %
520 FUNCTION {cap.anonymous} { % String Entry::cap_anonymous() {
521     is.in.chinese { % if (is_in_chinese()) {
522         cap.anonymous.zh % return cap_anonymous_zh;
523     } { % } else {
524         cap.anonymous.en % return cap_anonymous_en;
525     } if$ % }
526 } % }
527 %
528 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
529 %
530 FUNCTION {cap.no.address} { % String Entry::cap_no_address() {
531     is.in.chinese { % if (is_in_chinese()) {
532         cap.no.address.zh % return cap_no_address_zh;
533     } { % } else {
534         cap.no.address.en % return cap_no_address_en;
535     } if$ % }
536 } % }
537 %
538 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
539 %
540 FUNCTION {cap.no.publisher} { % String Entry::cap_no_publisher() {
541     is.in.chinese { % if (is_in_chinese()) {
542         cap.no.publisher.zh % return cap_no_publisher_zh;
543     } { % } else {
544         cap.no.publisher.en % return cap_no_publisher_en;
545     } if$ % }
546 } % }
547 %
548 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

```

549                                     %
550 FUNCTION {cap.et.al} {               % String Entry::cap_et_al() {
551   is.in.chinese {                     %   if (is_in_chinese()) {
552     cap.et.al.zh                       %     return cap_et_al_zh;
553   } {                                  %   } else {
554     cap.et.al.en                       %     return cap_et_al_en;
555   } if$                               %   }
556 }                                     % }
557                                     %
558 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
559                                     %
560 FUNCTION {cap.translate} {            % String Entry::cap_translate() {
561   is.in.chinese {                     %   if (is_in_chinese()) {
562     cap.translate.zh                   %     return cap_translate_zh;
563   } {                                  %   } else {
564     cap.translate.en                   %     return cap_translate_en;
565   } if$                               %   }
566 }                                     % }
567                                     %
568 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
569                                     %
570 FUNCTION {format.bibinfo} {           % String Entry::format_bibinfo(String info, String ty
571   swap$ add.brace swap$               %   info = add_brace(info);
572   "\bib" swap$ * swap$ *              %   return "\bib" + type + info;
573 }                                     % }
574                                     %
575 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
576 INTEGERS { nameindex namecount }      % static int nameindex, namecount;
577 STRINGS { namelist nameformat }        % static String namelist, nameformat;
578 STRINGS { firstname lastname jname vonname} % static String firstname, lastname, jname, vonname;
579                                     %
580 FUNCTION {format.names} {             % String Entry::format_names(String names) {
581   'namelist :=                         %   namelist = names;
582   namelist num.names$ 'namecount :=    %   namecount = num_names(namelist);
583   ""                                    %   String result = "";
584   #0 'nameindex :=                     %   nameindex = 0;
585   {nameindex namecount < nameindex #3 < and} { %   while ((nameindex < namecount) && (nameindex < 3)
586     nameindex #1 + 'nameindex :=        %     nameindex = nameindex + 1;
587     nameindex #1 > {                     %     if (nameindex > 1) {
588       cap.comma *                       %       result = result + cap_comma;
589     } 'skip$ if$                        %     }
590     namelist nameindex "{vv}" format.name$ %     String tmp = format_name(namelist, nameindex, '
591   'vonname :=                           %     vonname = tmp;
592     namelist nameindex "{jj}" format.name$ %     tmp = format_name(namelist, nameindex, "{jj}");
593     remove.dots 'jrname :=              %     jrname = remove_dots(tmp);
594     namelist nameindex "{f}" format.name$ %     tmp = format_name(namelist, nameindex, "{f}");

```

```

595     remove.dots                                %     tmp = remove_dots(tmp);
596     'firstname :=                              %     firstname = change_case(tmp, "u");
597     namelist nameindex "{11}" format.names$     %     tmp = format_name(namelist, nameindex, "{11}")
598     'lastname :=                               %     lastname = change_case(tmp, "u");
599     jrname empty$ not {                        %     if (! empty(jrname)) {
600         jrname * " " *                          %         result = result + jrname + " "
601     } 'skip$ if$                               %     }
602     vonname empty$ not {                      %     if (! empty(vonname)) {
603         vonname * " " *                        %         result = result + vonname + " "
604     } 'skip$ if$                               %     }
605     lastname empty$ not {                     %     if (! empty(lastname)) {
606         lastname * " " *                      %         result = result + lastname + " "
607     } 'skip$ if$                               %     }
608     firstname empty$ not {                    %     if (! empty(firstname)) {
609         firstname * " " *                     %         result = result + firstname + " "
610     } 'skip$ if$                               %     }
611     trim.end                                   %     result = trim_end(result);
612 } while$                                     % }
613 nameindex namecount < {                      % if (nameindex < namecount) {
614     cap.et.al *                               %     result = result + cap_et_al();
615 } 'skip$ if$                                  % }
616 }                                              % }
617                                              %
618                                              %
619 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
620                                              % // format English names
621 FUNCTION {format.names.en} {                  % String Entry::format_names_en(String names) {
622     format.names                              %     format_names(names);
623 }                                              % }
624                                              %
625 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
626                                              % // format Chinese names
627 FUNCTION {format.names.zh} {                  % String Entry::format_names_zh(String names) {
628     format.names                              %     format_names(names);
629 }                                              % }
630                                              %
631 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
632                                              %
633 FUNCTION {format.author} {                    % String Entry::format_author(String authors) {
634     is.in.chinese {                           %     if (is_in_chinese) {
635         format.names.zh                      %         authors = format_names_zh(authors);
636     } {                                        %     } else {
637         format.names.en                      %         authors = format_names_en(authors);
638     } if$                                    %     }
639     "author" format.bibinfo                  %     return format_bibinfo(authors, "author");
640 }                                              % }

```

```

641                                     %
642 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
643                                     %
644 FUNCTION {format.editor} {          % String Emtry::format_author(String editors) {
645   is.in.chinese {                  %   if (is_in_chinese) {
646     format.names.zh                %     editors = format_names_zh(editors);
647   } {                              %   } else {
648     format.names.en                %     editors = format_names_en(editors);
649   } if$                            %   }
650   "editor" format.bibinfo          %   return format_bibinfo(editors, "editor");
651 }                                  % }
652                                     %
653 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
654                                     %
655 FUNCTION {format.translator} {      % String Emtry::format_translator(String translators)
656   is.in.chinese {                  %   if (is_in_chinese) {
657     duplicate$                      %     String names = translators;
658     format.names.zh                %     translators = format_names_zh(translators);
659     swap$ num.names$ #3 > {         %     if (num_names(names) > 3) {
660       cap.translate.zh *           %       translators = translators + cap_translate_zh;
661     } {                             %     } else {
662       cap.comma * cap.translate.zh * %       translators = translators + cap_comma + cap_t
663     } if$                          %     }
664   } {                              %   } else {
665     duplicate$                      %     String names = translators;
666     format.names.en                %     translators = format_names_en(translators);
667     swap$ num.names$ #3 > {         %     if (num_names(names) > 3) {
668       cap.translate.en *           %     translators = translators + cap_translate_en;
669     } {                             %     } else {
670       cap.comma * cap.translate.en * %     translators = translators + cap_comma + cap_t
671     } if$                          %     }
672   } if$                            %   }
673   "translator" format.bibinfo      %   return format_bibinfo(translator, "translator");
674 }                                  % }
675                                     %
676 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
677                                     %
678 FUNCTION {format.title} {          % String Emtry::format_title(String title) {
679   "title" format.bibinfo           %   return format_bibinfo(title, "title");
680 }                                  % }
681                                     %
682 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
683                                     %
684 FUNCTION {format.booktitle} {      % String Emtry::format_booktitle(String booktitle) {
685   "booktitle" format.bibinfo       %   return format_bibinfo(booktitle, "booktitle");
686 }                                  % }

```

```

687                                     %
688 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
689                                     %
690 FUNCTION {format.mark} {                % String Emtry::format_mark(String mark) {
691     "[" swap$ * "]" *                    %   mark = "[" + mark + "]";
692     "mark" format.bibinfo                %   return format_bibinfo(mark, "mark");
693 }                                         % }
694                                     %
695 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
696                                     %
697 FUNCTION {format.country} {              % String Emtry::format_country(String country) {
698     "country" format.bibinfo              %   return format_bibinfo(country, "country");
699 }                                         % }
700                                     %
701 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
702                                     %
703 FUNCTION {format.patentid} {              % String Emtry::format_patentid(String patentid) {
704     "patentid" format.bibinfo              %   return format_bibinfo(patentid, "patentid");
705 }                                         % }
706                                     %
707 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
708                                     %
709 FUNCTION {format.edition} {              % String Emtry::format_edition(String edition) {
710     duplicate$ is.number {                %   if (is_number(edition)) {
711         is.in.chinese {                    %       if (is_in_chinese()) {
712             cap.edition.zh *                %           edition = edition + cap_edition_zh;
713         } {                                %       } else {
714             num.to.ordinal.en cap.edition.en * %           edition = num_to_ordinal_en(edition) + cap_e
715         } if$                               %       }
716     } 'skip$ if$                           %   }
717                                     % // use a \mbox{} to prevent line break within e
718     "\mbox{" swap$ * "}" *                 %   edition = "\mbox{" + edition + "}";
719     "edition" format.bibinfo                %   return format_bibinfo(edition, "edition");
720 }                                         % }
721                                     %
722 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
723                                     %
724 FUNCTION {format.organization} {          % String Emtry::format_organization(String organizati
725     "organization" format.bibinfo          %   return format_bibinfo(organization, "organization
726 }                                         % }
727                                     %
728 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
729                                     %
730 FUNCTION {format.address} {              % String Emtry::format_address(String address) {
731     "address" format.bibinfo                %   return format_bibinfo(address, "address");
732 }                                         % }

```



```

733                                     %
734 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
735                                     %
736 FUNCTION {format.publisher} {          % String Emtry::format_publisher(String publisher) {
737   "publisher" format.bibinfo          %   return format_bibinfo(publisher, "publisher");
738 }                                     % }
739                                     %
740 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
741                                     %
742 FUNCTION {format.institution} {        % String Emtry::format_institution(String institution) {
743   "institution" format.bibinfo        %   return format_bibinfo(institution, "institution");
744 }                                     % }
745                                     %
746 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
747                                     %
748 FUNCTION {format.school} {            % String Emtry::format_school(String school) {
749   "school" format.bibinfo             %   return format_bibinfo(school, "school");
750 }                                     % }
751                                     %
752 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
753                                     %
754 FUNCTION {format.year} {              % String Emtry::format_year(String year) {
755   "year" format.bibinfo               %   return format_bibinfo(year, "year");
756 }                                     % }
757                                     %
758 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
759                                     %
760 FUNCTION {format.date} {              % String Emtry::format_date(String date) {
761   "date" format.bibinfo               %   return format_bibinfo(date, "date");
762 }                                     % }
763                                     %
764 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
765                                     %
766 FUNCTION {format.journal} {           % String Emtry::format_journal(String journal) {
767   "journal" format.bibinfo            %   return format_bibinfo(journal, "journal");
768 }                                     % }
769                                     %
770 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
771                                     %
772 FUNCTION {format.volume} {            % String Emtry::format_volume(String volume) {
773   "volume" format.bibinfo             %   return format_bibinfo(volume, "volume");
774 }                                     % }
775                                     %
776 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
777                                     %
778 FUNCTION {format.number} {            % String Emtry::format_number(String number) {

```

```

779 add.bracket                                %    number = add_bracket(number);
780 "number" format.bibinfo                    %    return format_bibinfo(number, "number");
781 }                                           % }
782                                           %
783 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
784                                           %
785 FUNCTION {format.report.number} {           % String Emtry::format_report_number(String number) {
786 "number" format.bibinfo                    %    return format_bibinfo(number, "number");
787 }                                           % }
788                                           %
789 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
790                                           %
791 FUNCTION {format.version} {                 % String Emtry::format_version(String version) {
792 "version" format.bibinfo                    %    return format_bibinfo(version, "version");
793 }                                           % }
794                                           %
795 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
796                                           %
797 FUNCTION {format.pages} {                   % String Emtry::format_pages(String pages) {
798 "pages" format.bibinfo                      %    return format_bibinfo(pages, "pages");
799 }                                           % }
800                                           %
801 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
802                                           %
803 FUNCTION {format.modifydate} {              % String Emtry::format_modifydate(String modifydate) {
804 add.bracket                                %    modifydate = add_bracket(modifydate);
805 "modifydate" format.bibinfo                 %    return format_bibinfo(modifydate, "modifydate");
806 }                                           % }
807                                           %
808 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
809                                           %
810 FUNCTION {format.citedate} {                % String Emtry::format_citedate(String citedate) {
811 add.squarebracket                          %    citedate = add_squarebracket(citedate);
812 "citedate" format.bibinfo                   %    return format_bibinfo(citedate, "citedate");
813 }                                           % }
814                                           %
815 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
816                                           %
817                                           % // NOTE: do not use the format_bibinfo() for URL,
818                                           % // since if the URL contains special symbols such
819                                           % // as '%', the \biburl{ } will be broken.
820 FUNCTION {format.url} {                     % String Emtry::format_url(String url) {
821 "\url{" swap$ * "}" *                      %    return "\url{" + url + "}";
822 }                                           % }
823                                           %
824 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

```

825                                     %
826 FUNCTION {get.full.title} {         % String Entry::get_full_title() {
827     series empty$ {                 %     if (empty(this.series)) {
828         volume empty$ {             %         if (empty(this.volume)) {
829             title                   %             return this.title;
830         } {                          %         } else {
831             title cap.colon * cap.volume * volume * %             return this.title + cap_colon + cap_volume;
832         } if$                        %         }
833     } {                              %     } else {
834         volume empty$ {             %         if (empty(this.volume)) {
835             series cap.colon * title * %             return this.series + cap_colon + this.title;
836         } {                          %         } else {
837             series cap.comma * cap.volume * volume * %             String str = this.series + cap_comma + cal;
838             cap.colon * title *      %             return str + cap_colon + this.title;
839         } if$                        %         }
840     } if$                            %     }
841 }                                    % }
842                                     %
843 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
844                                     %
845 FUNCTION {get.full.booktitle} {      % String Entry::get_full_booktitle() {
846     series empty$ {                 %     if (empty(this.series)) {
847         volume empty$ {             %         if (empty(this.volume)) {
848             booktitle               %             return this.booktitle;
849         } {                          %         } else {
850             booktitle cap.colon * cap.volume * volume * %             return this.booktitle + cap_colon + cap_vol;
851         } if$                        %         }
852     } {                              %     } else {
853         volume empty$ {             %         if (empty(this.volume)) {
854             series cap.colon * booktitle * %             return this.series + cap_colon + this.bookt;
855         } {                          %         } else {
856             series cap.comma * cap.volume * volume * %             String str = this.series + cap_comma + cal;
857             cap.colon * booktitle *      %             return str + cap_colon + this.booktitle;
858         } if$                        %         }
859     } if$                            %     }
860 }                                    % }
861                                     %
862 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
863                                     %
864 FUNCTION {get.pages} {              % String Entry::get_pages() {
865     pages contain.dash {            %     if (contain_dash(this.pages)) {
866         pages extract.before.first.dash %         String p1 = extract_before_first_dash(this.pag;
867         pages extract.after.last.dash   %         String p2 = extract_after_last_dash(this.pages);
868         cap.dash swap$ * *             %         return p1 + cap_dash + p2;
869     } {                              %     } else {
870         pages                          %         return this.pages;

```

```

871 } if$ % }
872 } % }
873 %
874 %%%%%%%%%%
875 %
876 FUNCTION {output.author.or.editor} { % void Entry::output_author_or_editor(int required) {
877   'required := % this.required = required;
878   author empty$ not { % if (! empty(this.author)) {
879     author format.author write$ % write(format_author(this.author));
880     cap.period write$ % write(cap_period);
881   } { % } else {
882     editor empty$ not { % if (! empty(this.editor)) {
883       editor format.editor write$ % write(format_editor(this.editor));
884       cap.period write$ % write(cap_period);
885     } { % } else {
886       required { % if (required == 1) {
887         "Require author/editor: " cite$ * warning$ % warning("Require author/editor: " + this.cite);
888         cap.anonymous format.author write$ % write(format_author(cap_anonymous()));
889         cap.period write$ % write(cap_period);
890       } 'skip$ if$ % }
891     } if$ % }
892   } if$ % }
893 } % }
894 %
895 %%%%%%%%%%
896 %
897 FUNCTION {output.author} { % void Entry::output_author(int required) {
898   'required := % this.required = required;
899   author empty$ not { % if (! empty(this.author)) {
900     author format.author write$ % write(format_author(this.author));
901     cap.period write$ % write(cap_period);
902   } { % } else {
903     required { % if (required == 1) {
904       "Require author: " cite$ * warning$ % warning("Require author: " + this.cite);
905       cap.anonymous format.author write$ % write(format_author(cap_anonymous()));
906       cap.period write$ % write(cap_period);
907     } 'skip$ if$ % }
908   } if$ % }
909 } % }
910 %
911 %%%%%%%%%%
912 %
913 FUNCTION {output.editor} { % void Entry::output_editor(int required) {
914   'required := % this.required = required;
915   editor empty$ not { % if (! empty(this.editor)) {
916     editor format.editor write$ % write(format_editor(this.editor));

```

```

917     cap.period write$                                %     write(cap_period);
918 } {                                                  % } else {
919     required {                                       %     if (required == 1) {
920         "Require editor: " cite$ * warning$        %         warning("Require editor: " + this.cite);
921         cap.anonymous format.editor write$         %         write(format_editor(cap_anonymous()));
922         cap.period write$                           %         write(cap_period);
923     } 'skip$ if$                                     %     }
924 } if$                                                % }
925 }                                                    % }
926                                                     %
927 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
928                                                     %
929 FUNCTION {output.title} {                            % void Entry::output_title(int required) {
930     'required :=                                    %     this.required = required;
931     title empty$ not {                              %     if (! empty(this.title)) {
932         title format.title write$                  %         write(format_title(this.title));
933     } {                                              %     } else {
934         required {                                  %         if (required == 1) {
935             "Require title: " cite$ * warning$      %             warning("Require title: " + this.cite);
936         } 'skip$ if$                                %         }
937     } if$                                           %     }
938 }                                                    % }
939                                                     %
940 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
941                                                     %
942 FUNCTION {output.series.volume.title} {              % void Entry::output_series_volume_title(int required) {
943     'required :=                                    %     this.required = required;
944     title empty$ not {                              %     if (! empty(this.title)) {
945         get.full.title format.booktitle write$      %         write(format_booktitle(get_full_title()));
946     } {                                              %     } else {
947         required {                                  %         if (required == 1) {
948             "Require title: " cite$ * warning$      %             warning("Require title: " + this.cite);
949         } 'skip$ if$                                %         }
950     } if$                                           %     }
951 }                                                    % }
952                                                     %
953 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
954                                                     %
955 FUNCTION {output.series.volume.booktitle} {          % void Entry::output_series_volume_booktitle(int required) {
956     'required :=                                    %     this.required = required;
957     booktitle empty$ not {                          %     if (! empty(this.booktitle)) {
958         get.full.booktitle format.booktitle write$ %         write(format_booktitle(get_full_booktitle()));
959     } {                                              %     } else {
960         required {                                  %         if (required == 1) {
961             "Require booktitle: " cite$ * warning$  %             warning("Require booktitle: " + this.cite);
962         } 'skip$ if$                                %         }

```

```

963 } if$ % }
964 } % }
965 %
966 %%%%%%%%%%
967 %
968 FUNCTION {output.journal} { % void Entry::output_journal(int required) {
969   'required := % this.required = required;
970   journal empty$ not { % if (! empty(this.journal)) {
971     cap.period write$ % write(cap_period);
972     journal format.journal write$ % write(format_journal(this.journal));
973   } { % } else {
974     required { % if (required == 1) {
975       "Require journal: " cite$ * warning$ % warning("Require journal: " + this.cite);
976     } 'skip$ if$ % }
977   } if$ % }
978 } % }
979 %
980 %%%%%%%%%%
981 %
982 FUNCTION {output.mark} { % void Entry::output_mark(int required) {
983   'required := % this.required = required;
984   mark empty$ not { % if (! empty(this.mark)) {
985     mark format.mark write$ % write(format_mark(this.mark));
986   } { % } else {
987     required { % if (required == 1) {
988       "Require mark: " cite$ * warning$ % warning("Require mark: " + this.cite);
989     } 'skip$ if$ % }
990   } if$ % }
991 } % }
992 %
993 %%%%%%%%%%
994 %
995 FUNCTION {output.translator} { % void Entry::output_translator(int required) {
996   'required := % this.required = required;
997   translator empty$ not { % if (! empty(this.translator)) {
998     cap.period write$ % write(cap_period);
999     translator format.translator write$ % write(format_translator(this.translator));
1000 } { % } else {
1001   required { % if (required == 1) {
1002     "Require translator: " cite$ * warning$ % warning("Require translator: " + this.cite);
1003   } 'skip$ if$ % }
1004 } if$ % }
1005 } % }
1006 %
1007 %%%%%%%%%%
1008 %

```

```

1009 FUNCTION {output.edition} {                                % void Entry::output_edition(int required) {
1010   'required :=                                              %   this.required = required;
1011   edition empty$ not {                                       %   if (! empty(this.edition)) {
1012     cap.period write$                                         %     write(cap_period);
1013     edition format.edition write$                             %     write(format_edition(this.edition));
1014   } {                                                         %   } else {
1015     required {                                                %     if (required == 1) {
1016       "Require edition: " cite$ * warnings$                 %       warning("Require edition: " + this.cite);
1017     } 'skip$ if$                                              %     }
1018   } if$                                                       %   }
1019 }                                                            % }
1020                                                            %
1021 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1022                                                            %
1023 FUNCTION {output.address} {                                  % void Entry::output_address(int required) {
1024   'required :=                                              %   this.required = required;
1025   address empty$ not {                                       %   if (! empty(this.address)) {
1026     cap.period write$                                         %     write(cap_period);
1027     address format.address write$                             %     write(format_address(this.address));
1028   } {                                                         %   } else {
1029     required {                                                %     if (required == 1) {
1030       "Require address: " cite$ * warnings$                 %       warning("Require address: " + this.cite);
1031       cap.period write$                                       %       write(cap_period);
1032       cap.no.address format.address write$                   %       write(format_address(cap_no_address()));
1033     } 'skip$ if$                                              %     }
1034   } if$                                                       %   }
1035 }                                                            % }
1036                                                            %
1037 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1038                                                            %
1039 FUNCTION {output.publisher} {                                % void Entry::output_publisher(int required) {
1040   'required :=                                              %   this.required = required;
1041   publisher empty$ not {                                       %   if (! empty(this.publisher)) {
1042     cap.colon write$                                           %     write(cap_colon);
1043     publisher format.publisher write$                         %     write(format_publisher(this.publisher));
1044   } {                                                         %   } else {
1045     required {                                                %     if (required == 1) {
1046       "Require publisher: " cite$ * warning$                 %       warning("Require publisher: " + this.cite);
1047       cap.colon write$                                         %       write(cap_colon);
1048       cap.no.publisher format.publisher write$               %       write(format_publisher(cap_no_publisher()));
1049     } 'skip$ if$                                              %     }
1050   } if$                                                       %   }
1051 }                                                            % }
1052                                                            %
1053 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1054                                                            %

```

```

1055 FUNCTION {output.publisher.no.address} { % void Entry::output_publisher_no_address(int required) {
1056   'required := % this.required = required;
1057   publisher empty$ not { % if (! empty(this.publisher)) {
1058     cap.period write$ % write(cap_period);
1059     publisher format.publisher write$ % write(format_publisher(this.publisher));
1060   } { % } else {
1061     required { % if (required == 1) {
1062       "Require publisher: " cite$ * warning$ % warning("Require publisher: " + this.cite);
1063       cap.period write$ % write(cap_period);
1064       cap.no.publisher format.publisher write$ % write(format_publisher(cap_no_publisher()));
1065     } 'skip$ if$ % }
1066   } if$ % }
1067 } % }
1068 %
1069 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1070 %
1071 FUNCTION {output.school} { % void Entry::output_school(int required) {
1072   'required := % this.required = required;
1073   school empty$ not { % if (! empty(this.school)) {
1074     cap.colon write$ % write(cap_colon);
1075     school format.school write$ % write(format_school(this.school));
1076   } { % } else {
1077     required { % if (required == 1) {
1078       "Require school: " cite$ * warning$ % warning("Require publisher: " + this.cite);
1079       cap.colon write$ % write(cap_colon);
1080       cap.no.publisher format.school write$ % write(format_school(cap_no_publisher()));
1081     } 'skip$ if$ % }
1082   } if$ % }
1083 } % }
1084 %
1085 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1086 %
1087 FUNCTION {output.institution} { % void Entry::output_institution(int required) {
1088   'required := % this.required = required;
1089   institution empty$ not { % if (! empty(this.institution)) {
1090     cap.colon write$ % write(cap_colon);
1091     institution format.institution write$ % write(format_publisher(this.institution));
1092   } { % } else {
1093     required { % if (required == 1) {
1094       "Require institution: " cite$ * warning$ % warning("Require institution: " + this.cite);
1095       cap.colon write$ % write(cap_colon);
1096       cap.no.publisher format.institution write$ % write(format_institution(cap_no_publisher()));
1097     } 'skip$ if$ % }
1098   } if$ % }
1099 } % }
1100 %

```



```

1101 %%%%%%%%%%%
1102 %
1103 FUNCTION {output.year} { % void Entry::output_year(int required) {
1104     'required := % this.required = required;
1105     year empty$ not { % if (! empty(this.year)) {
1106         year format.year write$ % write(format_year(this.year));
1107     } { % } else {
1108         required { % if (required == 1) {
1109             "Require year: " cite$ * warning$ % warning("Require year: " + this.cite);
1110         } 'skip$ if$ % }
1111     } if$ % }
1112 } % }
1113 %
1114 %%%%%%%%%%%
1115 %
1116 FUNCTION {output.pages} { % void Entry::output_pages(int required) {
1117     'required := % this.required = required;
1118     pages empty$ not { % if (! empty(this.pages)) {
1119         cap.colon write$ % write(cap_colon);
1120         get.pages format.pages write$ % write(format_pages(get_pages()));
1121     } { % } else {
1122         required { % if (required == 1) {
1123             "Require pages: " cite$ * warning$ % warning("Require pages: " + this.cite);
1124         } 'skip$ if$ % }
1125     } if$ % }
1126 } % }
1127 %
1128 %%%%%%%%%%%
1129 %
1130 FUNCTION {output.modifydate} { % void Entry::output_modifydate(int required) {
1131     'required := % this.required = required;
1132     modifydate empty$ not { % if (! empty(this.modifydate)) {
1133         cap.space write$ % write(cap_space);
1134         modifydate format.modifydate write$ % write(format_modifydate(this.modifydate));
1135     } { % } else {
1136         required { % if (required == 1) {
1137             "Require modifydate: " cite$ * warning$ % warning("Require modifydate: " + this.cite);
1138         } 'skip$ if$ % }
1139     } if$ % }
1140 } % }
1141 %
1142 %%%%%%%%%%%
1143 %
1144 FUNCTION {output.citedate} { % void Entry::output_citedate(int required) {
1145     'required := % this.required = required;
1146     citedate empty$ not { % if (! empty(this.citedate)) {

```

```

1147     cap.space write$                                %     write(cap_space);
1148     citedate format.citedate write$                 %     write(format_citedate(this.citedate));
1149 } {                                                  % } else {
1150     required is.online or {                          %     if ((required == 1) || (is_online())) {
1151         "Require citedate: " cite$ * warning$        %         warning("Require citedate: " + this.cite);
1152     } 'skip$ if$                                     %     }
1153 } if$                                                % }
1154 }                                                    % }
1155                                                     %
1156 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1157                                                     %
1158 FUNCTION {output.date} {                            % void Entry::output_date(int required) {
1159     'required :=                                     %     this.required = required;
1160     date empty$ not {                                %     if (! empty(this.date)) {
1161         date format.date write$                     %         write(format_date(this.date));
1162     } {                                              %     } else {
1163         required {                                   %         if (required == 1) {
1164             "Require date: " cite$ * warning$        %             warning("Require date: " + this.cite);
1165         } 'skip$ if$                                 %         }
1166     } if$                                            %     }
1167 }                                                    % }
1168                                                     %
1169 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1170                                                     %
1171 FUNCTION {output.volume} {                          % void Entry::output_volume(int required) {
1172     'required :=                                     %     this.required = required;
1173     volume empty$ not {                             %     if (! empty(this.volume)) {
1174         cap.comma write$                             %         write(cap_comma);
1175         volume format.volume write$                 %         write(format_volume(this.volume));
1176     } {                                              %     } else {
1177         required {                                   %         if (required == 1) {
1178             "Require volume: " cite$ * warning$      %             warning("Require volume: " + this.cite);
1179         } 'skip$ if$                                 %         }
1180     } if$                                            %     }
1181 }                                                    % }
1182                                                     %
1183 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1184                                                     %
1185 FUNCTION {output.number} {                          % void Entry::output_number(int required) {
1186     'required :=                                     %     this.required = required;
1187     number empty$ not {                             %     if (! empty(this.number)) {
1188         number format.number write$                 %         write(format_number(this.number));
1189     } {                                              %     } else {
1190         required {                                   %         if (required == 1) {
1191             "Require number: " cite$ * warning$      %             warning("Require number: " + this.cite);
1192         } 'skip$ if$                                 %         }

```

```

1193 } if$ % }
1194 } % }
1195 %
1196 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1197 %
1198 FUNCTION {output.report.number} { % void Entry::output_report_number(int required) {
1199 'required := % this.required = required;
1200 number empty$ not { % if (! empty(this.number)) {
1201 cap.colon write$ % write(cap_colon);
1202 number format.report.number write$ % write(format_report_number(this.number));
1203 } { % } else {
1204 required { % if (required == 1) {
1205 "Require number: " cite$ * warning$ % warning("Require number: " + this.cite);
1206 } 'skip$ if$ % }
1207 } if$ % }
1208 } % }
1209 %
1210 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1211 %
1212 FUNCTION {output.country} { % void Entry::output_country(int required) {
1213 'required := % this.required = required;
1214 country empty$ not { % if (! empty(this.country)) {
1215 cap.colon write$ % write(cap_colon);
1216 country format.country write$ % write(format_country(this.country));
1217 } { % } else {
1218 required { % if (required == 1) {
1219 "Require country: " cite$ * warning$ % warning("Require country: " + this.cite);
1220 } 'skip$ if$ % }
1221 } if$ % }
1222 } % }
1223 %
1224 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1225 %
1226 FUNCTION {output.patentid} { % void Entry::output_patentid(int required) {
1227 'required := % this.required = required;
1228 patentid empty$ not { % if (! empty(this.patentid)) {
1229 cap.comma write$ % write(cap_comma);
1230 patentid format.patentid write$ % write(format_patentid(this.patentid));
1231 } { % } else {
1232 required { % if (required == 1) {
1233 "Require patentid: " cite$ * warning$ % warning("Require patentid: " + this.cite);
1234 } 'skip$ if$ % }
1235 } if$ % }
1236 } % }
1237 %
1238 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

```

1239                                     %
1240 FUNCTION {output.start.year} {      % void Entry::output_start_year(int required) {
1241   'required :=                      %   this.required = required;
1242   year empty$ not {                 %   if (! empty(this.year)) {
1243     year extract.before.first.dash  %     String str = extract_before_first_dash(this.yea
1244     format.year write$              %     write(format_year(str));
1245   } {                               %   } else {
1246     required {                      %     if (required == 1) {
1247       "Require year: " cite$ * warning$ %       warning("Require year: " + this.cite);
1248     } 'skip$ if$                    %     }
1249   } if$                             %   }
1250 }                                   % }
1251                                     %
1252 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1253                                     %
1254 FUNCTION {output.start.volume} {    % void Entry::output_start_volume(int required) {
1255   'required :=                      %   this.required = required;
1256   volume empty$ not {               %   if (! empty(this.volume)) {
1257     cap.comma write$                %     write(cap_comma);
1258     volume extract.before.first.dash %     String str = extract_before_first_dash(this.vol
1259     format.volume write$            %     write(format_volume(str));
1260   } {                               %   } else {
1261     required {                      %     if (required == 1) {
1262       "Require volume: " cite$ * warning$ %       warning("Require volume: " + this.cite);
1263     } 'skip$ if$                    %     }
1264   } if$                             %   }
1265 }                                   % }
1266                                     %
1267 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1268                                     %
1269 FUNCTION {output.start.number} {    % void Entry::output_start_number(int required) {
1270   'required :=                      %   this.required = required;
1271   number empty$ not {               %   if (! empty(this.number)) {
1272     number extract.before.first.dash %     String str = extract_before_first_dash(this.nu
1273     format.number write$            %     write(format_number(str));
1274   } {                               %   } else {
1275     required {                      %     if (required == 1) {
1276       "Require number: " cite$ * warning$ %       warning("Require number: " + this.cite);
1277     } 'skip$ if$                    %     }
1278   } if$                             %   }
1279 }                                   % }
1280                                     %
1281 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1282                                     %
1283 FUNCTION {output.end.year} {        % void Entry::output_end_year(int required) {
1284   'required :=                      %   this.required = required;

```

```

1285 year empty$ not { % if (! empty(this.year)) {
1286   year extract.after.last.dash % String str = extract_after_last_dash(this.year)
1287   format.year write$ % write(format_year(str));
1288 } { % } else {
1289   required { % if (required == 1) {
1290     "Require year: " cite$ * warning$ % warning("Require year: " + this.cite);
1291   } 'skip$ if$ % }
1292 } if$ % }
1293 } % }
1294 %
1295 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1296 %
1297 FUNCTION {output.end.volume} { % void Entry::output_end_volume(int required) {
1298   'required := % this.required = required;
1299   volume empty$ not { % if (! empty(this.volume)) {
1300     cap.comma write$ % write(cap_comma);
1301     volume extract.after.last.dash % String str = extract_after_last_dash(this.volum
1302     format.volume write$ % write(format_volume(str));
1303   } { % } else {
1304     required { % if (required == 1) {
1305       "Require volume: " cite$ * warning$ % warning("Require volume: " + this.cite);
1306     } 'skip$ if$ % }
1307   } if$ % }
1308 } % }
1309 %
1310 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1311 %
1312 FUNCTION {output.end.number} { % void Entry::output_end_number(int required) {
1313   'required := % this.required = required;
1314   number empty$ not { % if (! empty(this.number)) {
1315     number extract.after.last.dash % String str = extract_after_last_dash(this.numbe
1316     format.number write$ % write(format_number(str));
1317   } { % } else {
1318     required { % if (required == 1) {
1319       "Require number: " cite$ * warning$ % warning("Require number: " + this.cite);
1320     } 'skip$ if$ % }
1321   } if$ % }
1322 } % }
1323 %
1324 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1325 %
1326 FUNCTION {output.url.or.doi} { % void Entry::output_url_or_doi(int required) {
1327   'required := % this.required = required;
1328   url empty$ not { % if (! empty(this.url)) {
1329     cap.period write$ % write(cap_period);
1330     url format.url write$ % write(format_url(this.url));

```

```

1331 } { % } else {
1332     doi empty$ not { % if (! empty(this.doi)) {
1333         cap.period write$ % write(cap_period);
1334         cap.doi.url doi * format.url write$ % write(format_url(cap_doi_url + this.doi));
1335     } { % } else {
1336         required { % if (required == 1) {
1337             "Require URL or DOI: " cite$ * warning$ % warning("Require URL or DOI: " + this.cite);
1338         } 'skip$ if$ % }
1339     } if$ % }
1340 } if$ % }
1341 } % }
1342 %
1343 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1344 %
1345 FUNCTION {output.url} { % void Entry::output_url(int required) {
1346     'required := % this.required = required;
1347     url empty$ not { % if (! empty(this.url)) {
1348         cap.period write$ % write(cap_period);
1349         url format.url write$ % write(format_url(this.url));
1350     } { % } else {
1351         required { % if (required == 1) {
1352             "Require URL: " cite$ * warning$ % warning("Require URL: " + this.cite);
1353         } 'skip$ if$ % }
1354     } if$ % }
1355 } % }
1356 %
1357 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1358 %
1359 FUNCTION {output.version} { % void Entry::output_version(int required) {
1360     'required := % this.required = required;
1361     version empty$ not { % if (! empty(this.version)) {
1362         cap.period write$ % write(cap_period);
1363         version format.version write$ % write(format_version(this.version));
1364     } { % } else {
1365         required { % if (required == 1) {
1366             "Require version: " cite$ * warning$ % warning("Require version: " + this.cite);
1367         } 'skip$ if$ % }
1368     } if$ % }
1369 } % }
1370 %
1371 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1372 %
1373 FUNCTION {book.impl} { % void Entry::book_impl() {
1374     start.bibitem % start_bibitem();
1375     true output.author.or.editor % output_author_or_editor(true);
1376     true output.series.volume.title % output_series_volume_title(true);

```

```

1377 true output.mark % output_mark(true);
1378 false output.translator % output_translator(false);
1379 false output.edition % output_edition(false);
1380 publisher empty$ not { % if (! empty(this.publisher)) {
1381     true output.address % output_address(true);
1382     true output.publisher % output_publisher(true);
1383     cap.comma write$ % write(cap_comma);
1384 } { % } else {
1385     cap.period write$ % write(cap_period);
1386 } if$ % }
1387 true output.year % output_year(true);
1388 false output.pages % output_pages(false);
1389 false output.citedate % output_citedate(false);
1390 false output.url.or.doi % output_url_or_doi(false);
1391 end.bibitem % end_bibitem();
1392 } % }
1393 %
1394 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1395 %
1396 FUNCTION {book} { % void Entry::book() {
1397     "M" set.mark % set_mark("M");
1398     book.impl % book_impl();
1399 } % }
1400 %
1401 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1402 %
1403 FUNCTION {collection} { % void Entry::collection() {
1404     "G" set.mark % set_mark("G");
1405     book.impl % book_impl();
1406 } % }
1407 %
1408 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1409 %
1410 FUNCTION {proceedings} { % void Entry::proceedings() {
1411     "C" set.mark % set_mark("C");
1412     start.bibitem % start_bibitem();
1413     true output.editor % output_editor(true);
1414     true output.series.volume.title % output_series_volume_title(true);
1415     true output.mark % output_mark(true);
1416     false output.translator % output_translator(false);
1417     false output.edition % output_edition(false);
1418     publisher empty$ not { % if (! empty(this.publisher)) {
1419         true output.address % output_address(true);
1420         true output.publisher % output_publisher(true);
1421         cap.comma write$ % write(cap_comma);
1422     } { % } else {

```

```

1423     cap.period write$                                %     write(cap_period);
1424 } if$                                                % }
1425 true output.year                                    %     output_year(true);
1426 false output.pages                                %     output_pages(false);
1427 false output.citedate                            %     output_citedate(false);
1428 false output.url.or.doi                          %     output_url_or_doi(false);
1429 end.bibitem                                        %     end_bibitem();
1430 }                                                    % }
1431                                                    %
1432 %%%%%%%%%%%%%%%
1433                                                    %
1434 FUNCTION {conference} {                             % void Entry::conference() {
1435     proceedings                                    %     proceedings();
1436 }                                                    % }
1437                                                    %
1438 %%%%%%%%%%%%%%%
1439                                                    %
1440 FUNCTION {thesis.impl} {                             % void Entry::thesis_impl() {
1441     start.bibitem                                  %     start_bibitem();
1442     true output.author                            %     output_author(true);
1443     true output.title                             %     output_title(true);
1444     true output.mark                              %     output_mark(true);
1445     false output.translator                       %     output_translator(false);
1446     true output.address                           %     output_address(true);
1447     true output.school                            %     output_school(true);
1448     cap.comma write$                              %     write(cap_comma);
1449     true output.year                              %     output_year(true);
1450     false output.pages                            %     output_pages(false);
1451     false output.citedate                         %     output_citedate(false);
1452     false output.url.or.doi                      %     output_url_or_doi(false);
1453     end.bibitem                                    %     end_bibitem();
1454 }                                                    % }
1455                                                    %
1456 %%%%%%%%%%%%%%%
1457                                                    %
1458 FUNCTION {phdthesis} {                             % void Entry::phdthesis() {
1459     "D" set.mark                                  %     set_mark("D");
1460     thesis.impl                                    %     thesis_impl();
1461 }                                                    % }
1462                                                    %
1463 %%%%%%%%%%%%%%%
1464                                                    %
1465 FUNCTION {masterthesis} {                           % void Entry::masterthesis() {
1466     "D" set.mark                                  %     set_mark("D");
1467     thesis.impl                                    %     thesis_impl();
1468 }                                                    % }

```



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1469                                     %

此处添加 mastersthesis Entry
1470 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1471                                     %
1472 FUNCTION {mastersthesis} {           % void Entry::mastersthesis() {
1473     "D" set.mark                     %   set_mark("D");
1474     thesis.impl                      %   thesis_impl();
1475 }                                     % }
1476                                     %
1477 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1478                                     %
1479 FUNCTION {bachelorthesis} {         % void Entry::bachelorthesis() {
1480     "D" set.mark                     %   set_mark("D");
1481     thesis.impl                      %   thesis_impl();
1482 }                                     % }
1483                                     %
1484 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1485                                     %
1486 FUNCTION {techreport} {             % void Entry::techreport() {
1487     "R" set.mark                     %   set_mark("R");
1488     start.bibitem                    %   start_bibitem();
1489     true output.author               %   output_author(true);
1490     true output.title                %   output_title(true);
1491     false output.report.number       %   output_report_number(false);
1492     true output.mark                 %   output_mark(true);
1493     false output.translator          %   output_translator(false);
1494     false output.edition             %   output_edition(false);
1495     false output.version             %   output_version(false);
1496     institution empty$ not {         %   if (! empty(this.institution)) {
1497         true output.address           %       output_address(true);
1498         true output.institution       %       output_institution(true);
1499         cap.comma write$             %       write(cap_comma);
1500     } {                               %   } else {
1501         cap.period write$            %       write(cap_period);
1502     } if$                             %   }
1503     true output.year                 %   output_year(true);
1504     false output.pages               %   output_pages(false);
1505     false output.citedate            %   output_citedate(false);
1506     false output.url.or.doi          %   output_url_or_doi(false);
1507     end.bibitem                     %   end_bibitem();
1508 }                                     % }
1509                                     %
1510 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1511                                     %
1512 FUNCTION {standard} {               % void Entry::standard() {
1513     "S" set.mark                     %   set_mark("S");

```

```

1514 start.bibitem                                % start_bibitem();
1515 true output.author                           % output_author(true);
1516 true output.title                             % output_title(true);
1517 true output.mark                             % output_mark(true);
1518 false output.translator                       % output_translator(false);
1519 false output.edition                         % output_edition(false);
1520 publisher empty$ not {                       % if (! empty(this.publisher)) {
1521     true output.address                       %     output_address(true);
1522     true output.publisher                     %     output_publisher(true);
1523     cap.comma write$                          %     write(cap_comma);
1524 } {                                           % } else {
1525     cap.period write$                        %     write(cap_period);
1526 } if$                                         % }
1527 true output.year                             % output_year(true);
1528 false output.pages                           % output_pages(false);
1529 false output.citedate                       % output_citedate(false);
1530 false output.url.or.doi                     % output_url_or_doi(false);
1531 end.bibitem                                  % end_bibitem();
1532 }                                             % }
1533                                              %
1534 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1535                                              %
1536 FUNCTION {reference} {                       % void Entry::reference() {
1537     "K" set.mark                             %     set_mark("K");
1538     start.bibitem                             %     start_bibitem();
1539     false output.author.or.editor             %     output_author_or_editor(false);
1540     true output.series.volume.title           %     output_series_volume_title(true);
1541     true output.mark                         %     output_mark(true);
1542     false output.translator                   %     output_translator(false);
1543     false output.edition                     %     output_edition(false);
1544     publisher empty$ not {                   %     if (! empty(this.publisher)) {
1545         true output.address                   %         output_address(true);
1546         true output.publisher                 %         output_publisher(true);
1547         cap.comma write$                     %         write(cap_comma);
1548     } {                                       %     } else {
1549         cap.period write$                    %         write(cap_period);
1550     } if$                                    %     }
1551     true output.year                         %     output_year(true);
1552     false output.pages                       %     output_pages(false);
1553     false output.citedate                    %     output_citedate(false);
1554     false output.url.or.doi                  %     output_url_or_doi(false);
1555     end.bibitem                             %     end_bibitem();
1556 }                                             % }
1557                                              %
1558 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1559                                              %

```

```

1560 FUNCTION {manual} {                                % void Entry::manual() {
1561   reference                                           %   reference();
1562 }                                                       % }
1563                                                       %
1564 %%%%%%%%%%%%%%%
1565                                                       %
1566 FUNCTION {periodical.impl} {                          % void Entry::periodical_impl() {
1567   start.bibitem                                       %   start_bibitem();
1568   false output.editor                                %   output_editor(false);
1569   true output.title                                   %   output_title(true);
1570   true output.mark                                    %   output_mark(true);
1571   cap.period write$                                   %   write(cap_period);
1572   true output.start.year                             %   output_start_year(true);
1573   false output.start.volume                          %   output_start_volume(false);
1574   false output.start.number                          %   output_start_number(false);
1575   cap.dash write$                                     %   write(cap_dash);
1576   year contain.dash {                                %   if (contain_dash(this.year)) {
1577     true output.end.year                             %     output_end_year(true);
1578     false output.end.volume                          %     output_end_volume(false);
1579     false output.end.number                          %     output_end_number(false);
1580   } 'skip$ if$                                       %   }
1581   publisher empty$ not {                             %   if (! empty(this.publisher)) {
1582     true output.address                              %     output_address(true);
1583     true output.publisher                            %     output_publisher(true);
1584     cap.comma write$                                 %     write(cap_comma);
1585   } {                                                 %   } else {
1586     cap.period write$                                %     write(cap_period);
1587   } if$                                              %   }
1588   true output.start.year                             %   output_start_year(true);
1589   cap.dash write$                                     %   write(cap_dash);
1590   year contain.dash {                                %   if (contain_dash(this.year)) {
1591     true output.end.year                             %     output_end_year(true);
1592   } 'skip$ if$                                       %   }
1593   false output.citedate                              %   output_citedate(false);
1594   false output.url.or.doi                           %   output_url_or_doi(false);
1595   end.bibitem                                         %   end_bibitem();
1596 }                                                       % }
1597                                                       %
1598 %%%%%%%%%%%%%%%
1599                                                       %
1600 FUNCTION {periodical} {                              % void Entry::periodical() {
1601   "J" set.mark                                        %   set_mark("J");
1602   periodical.impl                                    %   periodical_impl();
1603 }                                                       % }
1604                                                       %
1605 %%%%%%%%%%%%%%%

```

```

1606                                     %
1607 FUNCTION {newspaper} {               % void Entry::newspaper() {
1608     "N" set.mark                      %   set_mark("N");
1609     periodical.impl                  %   periodical_impl();
1610 }                                     % }
1611                                     %
1612 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1613                                     %
1614 FUNCTION {patent} {                  % void Entry::patent() {
1615     "P" set.mark                      %   set_mark("P");
1616     start.bibitem                    %   start_bibitem();
1617     true output.author                %   output_author(true);
1618     true output.title                 %   output_title(true);
1619     true output.country               %   output_country(true);
1620     true output.patentid              %   output_patentid(true);
1621     true output.mark                  %   output_mark(true);
1622     cap.period write$                 %   write(cap_period);
1623     true output.date                 %   output_date(true);
1624     false output.citedate             %   output_citedate(false);
1625     false output.url.or.doi           %   output_url_or_doi(false);
1626     end.bibitem                      %   end_bibitem();
1627 }                                     % }
1628                                     %
1629 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1630                                     %
1631 FUNCTION {online} {                 % void Entry::online() {
1632     "EB" set.mark                    %   set_mark("EB");
1633     start.bibitem                    %   start_bibitem();
1634     false output.author               %   output_author(false);
1635     true output.title                 %   output_title(true);
1636     true output.mark                  %   output_mark(true);
1637     publisher empty$ not {           %   if (! empty(this.publisher)) {
1638         address empty$ not {         %       if (! empty(this.address)) {
1639             true output.address       %           output_address(true);
1640             true output.publisher     %           output_publisher(true);
1641             cap.comma write$          %           write(cap_comma);
1642         } {                           %       } else {
1643             true output.publisher.no.address %       output_publisher_no_address(true);
1644             cap.comma write$          %           write(cap_comma);
1645         } if$                         %       }
1646     } {                               %   } else {
1647         cap.period write$             %       write(cap_period);
1648     } if$                             %   }
1649     true output.year                 %   output_year(true);
1650     false output.modifydate           %   output_modifydate(false);
1651     true output.citedate              %   output_citedate(true);

```

```

1652 true output.url                % output_url(true);
1653 end.bibitem                     % end_bibitem();
1654 }                               % }
1655                                 %
1656 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1657                                 %
1658 FUNCTION {webpage} {            % void Entry::online() {
1659   online                         % online();
1660 }                               % }
1661                                 %
1662 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1663                                 %
1664 FUNCTION {program.impl} {       % void Entry::program_impl() {
1665   start.bibitem                 % start_bibitem();
1666   false output.author           % output_author(false);
1667   true output.title             % output_title(true);
1668   true output.mark              % output_mark(true);
1669   publisher empty$ not {        % if (! empty(this.publisher)) {
1670     true output.address         % output_address(true);
1671     true output.publisher       % output_publisher(true);
1672     cap.comma write$           % write(cap_comma);
1673   } {                           % } else {
1674     cap.period write$          % write(cap_period);
1675   } if$                        % }
1676   true output.year              % output_year(true);
1677   false output.citedate         % output_citedate(false);
1678   false output.url.or.doi       % output_url_or_doi(false);
1679   end.bibitem                  % end_bibitem();
1680 }                               % }
1681                                 %
1682 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1683                                 %
1684 FUNCTION {program} {            % void Entry::program() {
1685   "CP" set.mark                 % set_mark("CP");
1686   program.impl                  % program_impl();
1687 }                               % }
1688                                 %
1689 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1690                                 %
1691 FUNCTION {database} {           % void Entry::database() {
1692   "DB" set.mark                 % set_mark("DB");
1693   program.impl                  % program_impl();
1694 }                               % }
1695                                 %
1696 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1697                                 %

```

```

1698 FUNCTION {unpublished} {                                % void Entry::unpublished() {
1699   "H" set.mark                                             %   set_mark("H");
1700   start.bibitem                                           %   start_bibitem();
1701   true output.author                                       %   output_author(true);
1702   true output.title                                        %   output_title(true);
1703   true output.mark                                         %   output_mark(true);
1704   cap.period write$                                        %   write(cap_period);
1705   true output.year                                         %   output_year(true);
1706   false output.citedate                                    %   output_citedate(false);
1707   false output.url.or.doi                                 %   output_url_or_doi(false);
1708   end.bibitem                                              %   end_bibitem();
1709 }                                                         % }
1710                                                         %
1711 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1712                                                         %
1713 FUNCTION {manuscript} {                                    % void Entry::manuscript() {
1714   unpublished                                              %   unpublished();
1715 }                                                         % }
1716                                                         %
1717 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1718                                                         %
1719 FUNCTION {inbook.impl} {                                   % void Entry::inbook_impl() {
1720   start.bibitem                                           %   start_bibitem();
1721   true output.author                                       %   output_author(true);
1722   true output.title                                        %   output_title(true);
1723   true output.mark                                         %   output_mark(true);
1724   false output.translator                                 %   output_translator(false);
1725   cap.double.slash write$                                  %   write(cap_double_slash);
1726   false output.editor                                     %   output_editor(false);
1727   true output.series.volume.booktitle                     %   output_series_volume_booktitle(true);
1728   false output.edition                                    %   output_edition(false);
1729   publisher empty$ not {                                   %   if (! empty(this.publisher)) {
1730     true output.address                                    %     output_address(true);
1731     true output.publisher                                  %     output_publisher(true);
1732     cap.comma write$                                       %     write(cap_comma);
1733   } {                                                       %   } else {
1734     cap.period write$                                     %     write(cap_period);
1735   } if$                                                    %   }
1736   true output.year                                         %   output_year(true);
1737   false output.pages                                       %   output_pages(false);
1738   false output.citedate                                    %   output_citedate(false);
1739   false output.url.or.doi                                 %   output_url_or_doi(false);
1740   end.bibitem                                              %   end_bibitem();
1741 }                                                         % }
1742                                                         %
1743 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

```

1744                                     %
1745 FUNCTION {inbook} {                 % void Entry::inbook() {
1746     "M" set.mark                     %     set_mark("M");
1747     inbook.impl                      %     inbook_impl();
1748 }                                   % }
1749                                     %
1750 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1751                                     %
1752 FUNCTION {incollection} {           % void Entry::incollection() {
1753     "G" set.mark                     %     set_mark("G");
1754     inbook.impl                      %     inbook_impl();
1755 }                                   % }
1756                                     %
1757 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1758                                     %
1759 FUNCTION {inproceedings} {         % void Entry::inproceedings() {
1760     "C" set.mark                     %     set_mark("C");
1761     inbook.impl                      %     inbook_impl();
1762 }                                   % }
1763                                     %
1764 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1765                                     %
1766 FUNCTION {article} {               % void Entry::article() {
1767     "J" set.mark                     %     set_mark("J");
1768     start.bibitem                   %     start_bibitem();
1769     true output.author              %     output_author(true);
1770     true output.title               %     output_title(true);
1771     true output.mark                %     output_mark(true);
1772     true output.journal             %     output_journal(true);
1773     cap.comma write$                %     write(cap_comma);
1774     true output.year                %     output_year(true);
1775     false output.volume             %     output_volume(false);
1776     false output.number             %     output_number(false);
1777     false output.pages              %     output_pages(false);
1778     false output.citedate           %     output_citedate(false);
1779     false output.url.or.doi         %     output_url_or_doi(false);
1780     end.bibitem                    %     end_bibitem();
1781 }                                   % }
1782                                     %
1783 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1784                                     %
1785 FUNCTION {news} {                  % void Entry::news() {
1786     "N" set.mark                     %     set_mark("N");
1787     start.bibitem                   %     start_bibitem();
1788     true output.author              %     output_author(true);
1789     true output.title               %     output_title(true);

```

```

1790 true output.mark % output_mark(true);
1791 true output.journal % output_journal(true);
1792 cap.comma write$ % write(cap_comma);
1793 true output.date % output_date(true);
1794 false output.number % output_number(false);
1795 false output.citedate % output_citedate(false);
1796 false output.url.or.doi % output_url_or_doi(false);
1797 end.bibitem % end_bibitem();
1798 } % }
1799 %
1800 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1801 %
1802 FUNCTION {default.type} { % void Entry::default_type() {
1803   "Unsupported entry type for " cite$ * warning$ % warning("Unsupported entry type for " + this.cite$
1804 } % }
1805 %
1806 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1807 %
1808 FUNCTION {longest.label.pass} { % void longest_label_pass(Entry entry) {
1809   entry.count #1 + 'entry.count := % entry_count = entry_count + 1;
1810   entry.count int.to.str$ 'label := % this.label = int_to_str(entry_count);
1811   label width$ longest.label.width > { % if (width(this.label) > longest_label_width) {
1812     label 'longest.label := % longest_label = this.label;
1813     label width$ 'longest.label.width := % longest_label_width = width(this.label);
1814   } 'skip$ if$ % }
1815 } % }
1816 %
1817 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1818 %
1819 FUNCTION {write.style.commands} { % void write_style_commands() {
1820   cmd.bibauthor write$ % write(cmd_bibauthor);
1821   newline$ % writeln();
1822   cmd.bibeditor write$ % write(cmd_bibeditor);
1823   newline$ % writeln();
1824   cmd.bibtranslator write$ % write(cmd_bibtranslator);
1825   newline$ % writeln();
1826   cmd.bibtitle write$ % write(cmd_bibtitle);
1827   newline$ % writeln();
1828   cmd.bibbooktitle write$ % write(cmd_bibbooktitle);
1829   newline$ % writeln();
1830   cmd.bibjournal write$ % write(cmd_bibjournal);
1831   newline$ % writeln();
1832   cmd.bibmark write$ % write(cmd_bibmark);
1833   newline$ % writeln();
1834   cmd.bibcountry write$ % write(cmd_bibcountry);
1835   newline$ % writeln();

```



```

1836 cmd.bibpatentid write$ % write(cmd_bibpatentid);
1837 newline$ % writeln();
1838 cmd.bibedition write$ % write(cmd_bibedition);
1839 newline$ % writeln();
1840 cmd.biborganization write$ % write(cmd_biborganization);
1841 newline$ % writeln();
1842 cmd.bibaddress write$ % write(cmd_bibaddress);
1843 newline$ % writeln();
1844 cmd.bibpublisher write$ % write(cmd_bibpublisher);
1845 newline$ % writeln();
1846 cmd.bibinstitution write$ % write(cmd_bibinstitution);
1847 newline$ % writeln();
1848 cmd.bibschool write$ % write(cmd_bibschool);
1849 newline$ % writeln();
1850 cmd.bibvolume write$ % write(cmd_bibvolume);
1851 newline$ % writeln();
1852 cmd.bibnumber write$ % write(cmd_bibnumber);
1853 newline$ % writeln();
1854 cmd.bibversion write$ % write(cmd_bibversion);
1855 newline$ % writeln();
1856 cmd.bibpages write$ % write(cmd_bibpages);
1857 newline$ % writeln();
1858 cmd.bibmodifydate write$ % write(cmd_bibmodifydate);
1859 newline$ % writeln();
1860 cmd.bibcitedate write$ % write(cmd_bibcitedate);
1861 newline$ % writeln();
1862 cmd.bibyear write$ % write(cmd_bibyear);
1863 newline$ % writeln();
1864 cmd.bibdate write$ % write(cmd_bibdate);
1865 newline$ % writeln();
1866 cmd.biburl write$ % write(cmd_biburl);
1867 newline$ % writeln();
1868 } % }
1869 %
1870 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1871 %
1872 FUNCTION {begin.bib} { % void begin_bib() {
1873 preamble$ empty$ not { % if (! empty(preamble)) {
1874 preamble$ write$ % write(premeable);
1875 newline$ % writeln();
1876 } 'skip$ if$ % }
1877 env.bibbegin write$ % write(env_bibbegin);
1878 "{" longest.label * "}" * write$ % write "{" + longest.label + "}";
1879 newline$ % writeln();
1880 write.style.commands % write_style_commands();
1881 } % }

```

```

1882                                     %
1883 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1884                                     %
1885 FUNCTION {end.bib} {                 % void end_bib() {
1886     newline$                         %   writeln();
1887     env.bibend write$                 %   write(env_bibend);
1888     newline$                         %   writeln();
1889 }                                     % }
1890                                     %
1891 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1892                                     %
1893 FUNCTION {initialize} {              % void initialize() {
1894     #0 'entry.count :=                %   entry_count = 0;
1895     #0 'longest.label.width :=        %   longest_label_width = 0;
1896     "" 'longest.label :=              %   longest_label = "";
1897 }                                     % }
1898                                     %
1899 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1900                                     %
1901                                     % void main() {
1902 READ                                 %   List<Entry> entryList = read("<file>.bib");
1903 EXECUTE {initialize}                 %   initialize();
1904 ITERATE {longest.label.pass}          %   for (Entry entry : entryList) {
1905                                     %       longest_label_pass(entry);
1906                                     %   }
1907 EXECUTE {begin.bib}                  %   begin_bib();
1908 ITERATE {call.type$}                 %   for (Entry entry : entryList) {
1909                                     %       switch (typeof(entry)) {
1910                                     %           case "book":
1911                                     %               entry.book();
1912                                     %               break;
1913                                     %           case "article":
1914                                     %               entry.article();
1915                                     %               break;
1916                                     %               .
1917                                     %               .
1918                                     %               .
1919                                     %           case "incollection":
1920                                     %               entry.incollection();
1921                                     %               break;
1922                                     %           case "misc":
1923                                     %               entry.misc();
1924                                     %               break;
1925                                     %           default:
1926                                     %               entry.default_type();
1927                                     %       }

```

```

1928                                     %   }
1929 EXECUTE {end.bib}                    %   end_bib();
1930                                     % }
1931                                     %
1932 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1933 </bst>
1934 <bookcls | artcls | artpluscls>\NeedsTeXFormat{LaTeX2e}[1999/12/01]
1935 <bookcls>\ProvidesClass{hithesisbook}
1936 <artcls>\ProvidesClass{hithesisart}
1937 <artpluscls>\ProvidesClass{hithesisartplus}
1938 <bookcfg>\ProvidesFile{hithesisbook.cfg}
1939 <artcfg>\ProvidesFile{hithesisart.cfg}
1940 <hithesis-style>\ProvidesPackage{hithesis}
1941 <artpluscls | artcls | bookcls | bookcfg | artcfg | hithesis-style>[2020/07/29 3.0.4 Harbin Institute of Technology Thesis]
1942 <*artpluscls>
1943 \RequirePackage{ifthen}
1944 \RequirePackage{kvoptions}
1945 \SetupKeyvalOptions{
1946   family=hit,
1947   prefix=hit@,
1948   setkeys=\kvsetkeys}
1949
1950 \newif\ifhit@bachelor
1951 \newif\ifhit@master
1952 \newif\ifhit@doctor
1953 \define@key{hit}{type}{%
1954   \hit@bachelorfalse
1955   \hit@masterfalse
1956   \hit@doctorfalse
1957   \expandafter\csname hit@#1true\endcsname}
1958
1959 \newif\ifhit@shenzhen
1960 \newif\ifhit@weihai
1961 \newif\ifhit@harbin
1962 \define@key{hit}{campus}{%
1963   \hit@shenzhenfalse
1964   \hit@weihaifalse
1965   \hit@harbinfalse
1966   \expandafter\csname hit@#1true\endcsname}
1967 \ifhit@weihai\relax\else
1968 \ifhit@shenzhen\relax\else
1969 \hit@harbintrue
1970 \fi
1971 \fi
1972
1973 \newif\ifhit@opening

```

```

1974 \newif\ifhit@midterm
1975 \define@key{hit}{stage}{%
1976   \hit@openingfalse
1977   \hit@midtermfalse
1978   \expandafter\csname hit@#1true\endcsname}
1979
1980
1981 \DeclareStringOption{fontset}
1982
1983 \DeclareDefaultOption{\PassOptionsToClass{\CurrentOption}{ctexart}}
1984
1985 \ProcessKeyvalOptions*
1986 \PassOptionsToPackage{no-math}{fontspec}
1987
1988 \ifhit@bachelor\relax\else
1989 \ifhit@master\relax\else
1990 \ifhit@doctor\relax\else
1991 \ClassError{hithesisartplus}%
1992 {
1993   \MessageBreak Please specify thesis type in option:
1994   \MessageBreak type=[bachelor | master | doctor]
1995 }
1996 \fi
1997 \fi
1998 \fi
1999
2000 \ifhit@opening\relax\else
2001 \ifhit@midterm\relax\else
2002 \ClassError{hithesisartplus}%
2003 {
2004   \MessageBreak Please specify stage in option:
2005   \MessageBreak stage=<opening|midterm>
2006 }
2007 \fi
2008 \fi
2009
2010
2011 \ifhit@doctor
2012   \ifhit@midterm
2013     \ifhit@shenzhen
2014       \relax
2015     \else
2016       \ClassError{hithesisartplus}%
2017     {
2018       \MessageBreak This document class only support midterm report for doctor
2019       in shenzhen campus

```

```

2020     }
2021     \fi
2022 \else
2023     \ClassError{hithesisartplus}%
2024     {
2025         \MessageBreak This document class only support midterm report for doctor
2026         in shenzhen campus
2027     }
2028 \fi
2029 \else
2030     \ClassError{hithesisartplus}%
2031     {
2032         \MessageBreak This document class only support midterm report for doctor
2033         in shenzhen campus
2034     }
2035 \fi
2036
2037 \ifthenelse%
2038 {\equal{\hit@fontset}{}}%
2039 {%
2040     \PassOptionsToPackage{AutoFakeBold=2}{xeCJK}
2041 }%
2042 {%
2043     \ifthenelse%
2044     {\equal{\hit@fontset}{siyuan}}%
2045     {\relax}%
2046     {%
2047         \PassOptionsToPackage{AutoFakeBold=2}{xeCJK}
2048     }%
2049     \PassOptionsToClass{fontset=\hit@fontset}{ctexart}
2050 }%
2051 \LoadClass[a4paper,UTF8,zihao=-4,scheme=plain]{ctexart}
2052
2053
2054 \RequirePackage{etoolbox}
2055 \RequirePackage{ifxetex}
2056 \ifxetex
2057 \else
2058     \ClassError{hithesis}{Please use: \MessageBreak xelatex}
2059 \fi
2060 \RequirePackage{xparse}
2061 \RequirePackage{amsmath}
2062 \RequirePackage[amsmath,thmmarks,hyperref]{ntheorem}
2063 \RequirePackage{amssymb}
2064 \RequirePackage[defaultsup]{newtxtext}
2065

```

```

2066 \RequirePackage{courier}
2067 \RequirePackage{graphicx}
2068 \RequirePackage{pdfpages}
2069 \includepdfset{fitpaper=true}
2070 \RequirePackage{enumitem}          % 使用 enumitem 宏包, 改变列表项的格式
2071 \RequirePackage{environ}
2072 \RequirePackage[perpage,hang]{footmisc}
2073 \RequirePackage{CJKfntef}
2074
2075 \RequirePackage{longtable}
2076 \RequirePackage{booktabs}
2077 \RequirePackage[sort&compress,numbers]{natbib}
2078 \RequirePackage{hyperref}
2079 \hypersetup{%
2080   CJKbookmarks=true,
2081   linktoc=all,
2082   bookmarksnumbered=true,
2083   bookmarksopen=true,
2084   bookmarksopenlevel=1,
2085   breaklinks=true,
2086   colorlinks=false,
2087   plainpages=false,
2088   pdfborder=0 0 0}
2089 \urlstyle{same}
2090
2091 \RequirePackage{geometry}
2092
2093 \geometry{% 根据 PlutoThesis 原版定义而来
2094   a4paper, % 210 * 297mm
2095   hcentering,
2096   ignoreall,
2097   nomarginpar,
2098   centering,
2099   text={150true mm,236true mm},
2100   left=30true mm,
2101   head=5true mm,
2102   headsep=2true mm,
2103   footskip=0true mm,
2104   foot=5.2true mm
2105 }
2106
2107 \RequirePackage{tikzpagenodes}
2108 \RequirePackage{eso-pic}
2109 \RequirePackage{tikz}
2110 \usetikzlibrary{calc}
2111

```

```

2112 \RequirePackage{fancyhdr}
2113
2114
2115 \RequirePackage{tabularx}
2116 \RequirePackage{varwidth}
2117 \RequirePackage{changepage}
2118 \RequirePackage{multicol}
2119 \RequirePackage[below]{placeins}% 允许上一个 section 的浮动图形出现在下一个 section 的开始部
    分, 还提供\FloatBarrier 命令, 使所有未处理的浮动图形立即被处理
2120 \RequirePackage{flafter}          % 使得所有浮动体不能被放置在其浮动环境之前, 以免浮动体在引述它
    的文本之前出现.
2121 \RequirePackage{multirow}          % 使用 Multirow 宏包, 使得表格可以合并多个 row 格
2122 \RequirePackage{subfigure}% 支持子图 %centerlast 设置最后一行是否居中
2123 \RequirePackage[subfigure]{ccaption} % 支持双语标题
2124 \RequirePackage{xltextra}
2125
2126 \RequirePackage{lipsum}%random text
2127
2128 %-- 添加字号设置 --%
2129 \renewcommand\normalsize{%
2130   \@setfontsize\normalsize{12bp}{15bp}%
2131   \abovedisplayskip=6pt
2132   \abovedisplayshortskip=6pt
2133   \belowdisplayskip=\abovedisplayskip
2134   \belowdisplayshortskip=\abovedisplayshortskip}
2135 \def\hit@def@fontsize#1#2{%
2136   \expandafter\newcommand\csname #1\endcsname[1][1.3]{%
2137     \fontsize{#2}{##1\dimexpr #2}\selectfont}}
2138 \hit@def@fontsize{dachu}{58bp}
2139 \hit@def@fontsize{chuhao}{42bp}
2140 \hit@def@fontsize{xiaochu}{36bp}
2141 \hit@def@fontsize{yihao}{26bp}
2142 \hit@def@fontsize{xiaoyi}{24bp}
2143 \hit@def@fontsize{erhao}{22bp}
2144 \hit@def@fontsize{xiaoer}{18bp}
2145 \hit@def@fontsize{sanhao}{16bp}
2146 \hit@def@fontsize{xiaosan}{15bp}
2147 \hit@def@fontsize{sihao}{14bp}
2148 \hit@def@fontsize{banxiaosi}{13bp}
2149 \hit@def@fontsize{xiaosi}{12bp}
2150 \hit@def@fontsize{dawu}{11bp}
2151 \hit@def@fontsize{wuhao}{10.5bp}
2152 \hit@def@fontsize{xiaowu}{9bp}
2153 \hit@def@fontsize{liuhao}{7.5bp}
2154 \hit@def@fontsize{xiaoliu}{6.5bp}
2155 \hit@def@fontsize{qihao}{5.5bp}

```

```

2156 \hit@def@fontsize{bahao}{5bp}
2157
2158
2159
2160
2161
2162
2163 %-- 设置字号 --%
2164 \ctexset{%
2165   section={
2166     afterindent=true,
2167     beforekip={7.5bp},% 上下空 0.5 行
2168     afterskip={7.5bp},
2169     format={\normalsize},
2170     aftername=\enspace,
2171     fixskip=true,
2172     break={},
2173   },
2174   subsection={
2175     afterindent=true,
2176     beforekip={7bp},
2177     afterskip={7bp},
2178     format={\normalsize},
2179     aftername=\enspace,
2180     fixskip=true,
2181     break={},
2182   },
2183   subsubsection={
2184     afterindent=true,
2185     beforekip={3bp},
2186     afterskip={3bp},
2187     format={\normalsize},
2188     aftername=\enspace,
2189     fixskip=true,
2190     break={},
2191   },
2192   paragraph/afterindent=true,
2193   subparagraph/afterindent=true
2194 }
2195
2196
2197 \let\hit@section\section
2198 \RenewDocumentCommand\section{s o m s}{%
2199   \IfBooleanF{#4}{\noindent\tikz[overlay] \draw (-5mm,0mm) -- (155mm,0mm);} %
2200   \IfBooleanTF{#1}%
2201   {% if \section*

```



```

2202 \IfNoValueTF{#2}%
2203 {\hit@section*{#3}}%
2204 {\hit@section*{#2}{#3}}%
2205 }%
2206 {% if \section
2207 \IfNoValueTF{#2}%
2208 {\hit@section{#3}}%
2209 {\hit@section{#2}{#3}}%
2210 }
2211 }
2212
2213
2214
2215 \def\hit@def@term#1{%
2216 \define@key{hit}{#1}{\csname #1\endcsname{##1}}
2217 \expandafter\gdef\csname #1\endcsname##1{%
2218 \expandafter\gdef\csname hit@#1\endcsname{##1}}
2219 \csname #1\endcsname{}}
2220
2221
2222 \hit@def@term{ctitlecover} % 中文标题封面
2223 \hit@def@term{ctitleone}
2224 \hit@def@term{ctitletwo}
2225 \hit@def@term{csubject}
2226 \hit@def@term{cauthor}
2227 \hit@def@term{cstudentid}
2228 \hit@def@term{cclassid}
2229 \hit@def@term{caffil}
2230 \hit@def@term{csupervisor}
2231 \hit@def@term{cdate}
2232 \hit@def@term{cenrolldate}
2233
2234
2235 \def\hit@parse@keywords#1{
2236 \define@key{hit}{#1}{\csname #1\endcsname{##1}}
2237 \expandafter\gdef\csname hit@#1\endcsname{}
2238 \expandafter\gdef\csname #1\endcsname##1{
2239 \@for\reserved@a:=##1\do{
2240 \expandafter\ifx\csname hit@#1\endcsname\@empty\else
2241 \expandafter\g@addto@macro\csname hit@#1\endcsname{%
2242 \ignorespaces\csname hit@#1separator\endcsname}
2243 \fi
2244 \expandafter\expandafter\expandafter\g@addto@macro%
2245 \expandafter\csname hit@#1\endcsname\expandafter\endcsname\expandafter{\reserved@a}}}}
2246
2247 \def\hitsetup{\kvsetkeys{hit}}

```

```

2248
2249 \newcommand{\hit@report@titlepage@graduate}{
2250   \ifthenelse%
2251     {\equal{\hit@fontset}{siyuan}}%
2252     {\xiaosi[1]\vspace*{0.65em}}%
2253     {\xiaosi[1]\textcolor{rgb}{1,1,1}{\songti{\hit@hi}}}%
2254     \vspace*{10mm}
2255   \begin{center}
2256     \songti\erhao\textbf{\hit@cschoolname\ifhit@shenzhen\hit@shenzhencampus\fi}
2257   \end{center}
2258   \begin{center}
2259     \songti\erhao\textbf{\hit@cthesis midtermcheck}
2260   \end{center}
2261   \vspace{66bp}
2262   \parbox[b][3cm][t]{\textwidth}{
2263     \begin{center}\songti\sihao
2264       \renewcommand{\arraystretch}{1.67}
2265       \begin{tabular}{l@{\ \ }c}
2266         \textbf{\hit@graduate@studenttitle} & \textbf{\hit@cauthor}\\
2267         \hline
2268         \textbf{\hit@graduate@enrolldate} & \textbf{\hit@cenrolldate}\\
2269         \hline
2270         \textbf{\hit@graduate@thesistitle} & \textbf{\hit@ctitleone}\\
2271         \hline
2272         & \textbf{\hit@ctitletwo}\\
2273         \hline
2274         \textbf{\hit@graduate@cafflimajor} & \textbf{\hit@csubject}\\
2275         \hline
2276         \textbf{\hit@graduate@datetitle} & \textbf{\hit@cdate}\\
2277         \hline
2278         \textbf{\hit@graduate@supervisor} & \textbf{\hit@csupervisor}\\
2279         \hline
2280       \end{tabular}\renewcommand{\arraystretch}{1}
2281     \end{center}
2282   }
2283 }
2284
2285
2286
2287
2288
2289
2290 \def\makecover{
2291   \begin{titlepage}
2292     \hit@report@titlepage@graduate
2293     \clearpage

```

```

2294 \hit@shenzhen@doctor@midterm@note
2295 \end{titlepage}
2296 \AddToShipoutPicture{%
2297 \begin{tikzpicture}[remember picture,overlay]
2298 \draw ($(current page text area.south west)+(-5mm,0mm)$) rectangle ($(current page text area.nor
2299 \end{tikzpicture}
2300 }
2301 \pagestyle{fancy}
2302 \fancyhead{}
2303 \renewcommand{\headrulewidth}{0pt}
2304 \renewcommand{\footrulewidth}{0pt}
2305 \fancyfoot[C]{\xiaowu~\thepage~}
2306 }
2307
2308
2309
2310
2311
2312
2313
2314 \newcommand\bibstyle@numerical{\bibpunct{[]{}{,}{s}{,}}{\textsuperscript{,}}}
2315 \newcommand\bibstyle@inline{\bibpunct{[]{}{,}{n}{,}}{\hit@inline@sep}}
2316
2317 \citestyle{numerical}
2318 \DeclareRobustCommand\inlinecite{\@inlinecite}
2319 \def\@inlinecite#1{\begingroup\citestyle{inline}\let\@cite\NAT@citenum\citep{#1}\endgroup}
2320 \let\onlinecite\inlinecite
2321
2322 \renewenvironment{thebibliography}[1]{%
2323 \list{\@biblabel{\@arabic{c@enumiv}}}%
2324 {\renewcommand{\makelabel}[1]{##1\hfill}
2325 \settowidth{\labelwidth}{\@biblabel{#1}}
2326 \setlength{\labelsep}{0.5em}
2327 \setlength{\itemindent}{0pt}
2328 \setlength{\leftmargin}{\labelsep+\labelwidth}
2329 \addtolength{\itemsep}{-0.8em}
2330 \usecounter{enumiv}%
2331 \let\p@enumiv\@empty
2332 \renewcommand\theenumiv{\@arabic{c@enumiv}}}%
2333 \sloppy\frenchspacing
2334 \flushbottom
2335 \clubpenalty0
2336 \@clubpenalty \clubpenalty
2337 \widowpenalty0%
2338 \interlinepenalty-50%
2339 \sfcode'\.\@m}

```

```

2340
2341 \AtEndOfClass{\input{hithesisart.cfg}}
2342 \AtEndOfClass{\sloppy}
2343 </artpluscls>

添加 artcls
2344 <*artcls>
2345 \RequirePackage{ifthen}
2346 \RequirePackage{kvoptions}
2347 \SetupKeyvalOptions{
2348   family=hit,
2349   prefix=hit@,
2350   setkeys=\kvsetkeys}
2351
2352 \newif\ifhit@bachelor
2353 \newif\ifhit@master
2354 \newif\ifhit@doctor
2355 \define@key{hit}{type}{%
2356   \hit@bachelorfalse
2357   \hit@masterfalse
2358   \hit@doctorfalse
2359   \expandafter\csname hit@#1true\endcsname}
2360
2361
2362 \newif\ifhit@shenzhen
2363 \newif\ifhit@weihai
2364 \newif\ifhit@harbin
2365 \define@key{hit}{campus}{%
2366   \hit@shenzhenfalse
2367   \hit@weihaifalse
2368   \hit@harbinfalse
2369   \expandafter\csname hit@#1true\endcsname}
2370 \ifhit@weihai\relax\else
2371 \ifhit@shenzhen\relax\else
2372 \hit@harbintrue
2373 \fi
2374 \fi
2375
2376
2377 \newif\ifhit@opening
2378 \newif\ifhit@midterm
2379 \define@key{hit}{stage}{%
2380   \hit@openingfalse
2381   \hit@midtermfalse
2382   \expandafter\csname hit@#1true\endcsname}
2383
2384 \DeclareBoolOption[true]{raggedbottom}

```

```

2385 \DeclareBoolOption[false]{pifootnote}
2386 \DeclareBoolOption[false]{debug}
2387 \DeclareBoolOption[true]{toc}
2388 \DeclareBoolOption[true]{newtxmath}
2389
2390 \DeclareStringOption{fontset}
2391
2392
2393 \DeclareDefaultOption{\PassOptionsToClass{\CurrentOption}{ctexart}}
2394
2395 \ProcessKeyvalOptions*
2396 \PassOptionsToPackage{no-math}{fontspec}
2397
2398 \ifhit@bachelor\relax\else
2399 \ifhit@master\relax\else
2400 \ifhit@doctor\relax\else
2401 \ClassError{hithesisart}%
2402 {
2403   \MessageBreak Please specify thesis type in option:
2404   \MessageBreak type=[bachelor | master | doctor]
2405 }
2406 \fi
2407 \fi
2408 \fi
2409
2410 \ifhit@opening\relax\else
2411 \ifhit@midterm\relax\else
2412 \ClassError{hithesisart}%
2413 {
2414   \MessageBreak Please specify stage in option:
2415   \MessageBreak stage=<opening|midterm>
2416 }
2417 \fi
2418 \fi
2419
2420
2421 \ifhit@doctor
2422 \ifhit@midterm
2423 \ifhit@shenzhen
2424 \ClassError{hithesisart}%
2425 {
2426   \MessageBreak This document class does not support midterm report for doctor
2427   in shenzhen campus.
2428   \MessageBreak please use \string\documentclass{hithesisartplus}
2429 }
2430 \fi

```

```

2431 \fi
2432 \fi
2433
2434 \ifthenelse%
2435 {\equal{\hit@fontset}{}}%
2436 {%
2437   \PassOptionsToPackage{AutoFakeBold=2}{xeCJK}
2438 }%
2439 {%
2440   \ifthenelse%
2441   {\equal{\hit@fontset}{siyuan}}%
2442   {\relax}%
2443   {%
2444     \PassOptionsToPackage{AutoFakeBold=2}{xeCJK}
2445   }%
2446   \PassOptionsToClass{fontset=\hit@fontset}{ctexart}
2447 }%
2448 \LoadClass[a4paper,UTF8,zihao=-4,scheme=plain]{ctexart}
2449
2450
2451 \RequirePackage{etoolbox}
2452 \RequirePackage{ifxetex}
2453 \ifxetex
2454 \else
2455     \ClassError{hithesis}%
2456     {Please use: \MessageBreak
2457     xelatex}{}
2458 \fi
2459 \RequirePackage{xparse}
2460 \RequirePackage{amsmath}
2461 \RequirePackage[amsmath,thmmarks,hyperref]{ntheorem}
2462 \RequirePackage{amssymb}
2463 \RequirePackage[defaultsup]{newtxtext}
2464 \ifhit@newtxmath
2465 \RequirePackage{newtxmath}
2466 \fi
2467 \RequirePackage{courier}
2468 \RequirePackage{graphicx}
2469 \RequirePackage{pdfpages}
2470 \includepdfset{fitpaper=true}
2471 \RequirePackage{enumitem} % 使用 enumitem 宏包, 改变列表项的格式
2472 \RequirePackage{environ}
2473 \ifhit@raggedbottom
2474   \RequirePackage[bottom,perpage,hang]{footmisc}
2475   \raggedbottom
2476 \else

```

```
2477 \RequirePackage[perpage,hang]{footmisc}
2478 \fi
2479 \ifhit@pifootnote
2480 \RequirePackage{pifont}
2481 \fi
2482 \RequirePackage{CJKfntef}
2483
2484 \RequirePackage{longtable}
2485 \RequirePackage{booktabs}
2486 \RequirePackage[sort&compress,numbers]{natbib}
2487 \RequirePackage{hyperref}
2488 \hypersetup{%
2489   CJKbookmarks=true,
2490   linktoc=all,
2491   bookmarksnumbered=true,
2492   bookmarksopen=true,
2493   bookmarksopenlevel=1,
2494   breaklinks=true,
2495   colorlinks=false,
2496   plainpages=false,
2497   pdfborder=0 0 0}
2498 \urlstyle{same}
2499
2500 \ifhit@debug
2501 \RequirePackage[showframe]{geometry}
2502 \else
2503 \RequirePackage{geometry}
2504 \fi
2505
2506 \geometry{% 根据 PlutoThesis 原版定义而来
2507   a4paper, % 210 * 297mm
2508   hcentering,
2509   ignoreall,
2510   nomarginpar,
2511   centering,
2512   text={150true mm,236true mm},
2513   left=30true mm,
2514   head=5true mm,
2515   headsep=2true mm,
2516   footskip=0true mm,
2517   foot=5.2true mm
2518 }
2519
2520 \ifhit@debug%
2521 \RequirePackage{layout}
2522 \RequirePackage{layouts}
```

```

2523 \RequirePackage{lineno}
2524 \fi
2525
2526 \RequirePackage{fancyhdr}
2527 \RequirePackage{tabularx}
2528 \RequirePackage{varwidth}
2529 \RequirePackage{changepage}
2530 \RequirePackage{multicol}
2531 \RequirePackage[below]{placeins}% 允许上一个 section 的浮动图形出现在下一个 section 的开始部
    分，还提供\FloatBarrier 命令，使所有未处理的浮动图形立即被处理
2532 \RequirePackage{flafter}          % 使得所有浮动体不能被放置在其浮动环境之前，以免浮动体在引述它
    的文本之前出现。
2533 \RequirePackage{multirow}          % 使用 Multirow 宏包，使得表格可以合并多个 row 格
2534 \RequirePackage{subfigure}% 支持子图 %centerlast 设置最后一行是否居中
2535 \RequirePackage[subfigure]{ccaption} % 支持双语标题
2536 \RequirePackage{xltextra}
2537
    设置深圳校区开题报告的正文行距与毕业论文模板一致
2538
2539 \ifhit@shenzhen
2540 \renewcommand\normalsize{%
2541   \@setfontsize\normalsize{12bp}{20.50398bp}%
2542   \abovedisplayskip=8pt
2543   \abovedisplayshortskip=8pt
2544   \belowdisplayskip=\abovedisplayskip
2545   \belowdisplayshortskip=\abovedisplayshortskip}
2546 \else
2547 \renewcommand\normalsize{%
2548   \@setfontsize\normalsize{12bp}{15bp}%
2549   \abovedisplayskip=6pt
2550   \abovedisplayshortskip=6pt
2551   \belowdisplayskip=\abovedisplayskip
2552   \belowdisplayshortskip=\abovedisplayshortskip}
2553 \fi
2554
2555 \def\hit@def@fontsize#1#2{%
2556   \expandafter\newcommand\csname #1\endcsname[1][1.3]{%
2557     \fontsize{#2}{##1\dimexpr #2}\selectfont}}
2558 \hit@def@fontsize{dachu}{58bp}
2559 \hit@def@fontsize{chuhao}{42bp}
2560 \hit@def@fontsize{xiaochu}{36bp}
2561 \hit@def@fontsize{yihao}{26bp}
2562 \hit@def@fontsize{xiaoyi}{24bp}
2563 \hit@def@fontsize{erhao}{22bp}
2564 \hit@def@fontsize{xiaoer}{18bp}
2565 \hit@def@fontsize{sanhao}{16bp}

```



```

2566 \hit@def@fontsize{xiaosan}{15bp}
2567 \hit@def@fontsize{sihao}{14bp}
2568 \hit@def@fontsize{banxiaosi}{13bp}
2569 \hit@def@fontsize{xiaosi}{12bp}
2570 \hit@def@fontsize{dawu}{11bp}
2571 \hit@def@fontsize{wuhao}{10.5bp}
2572 \hit@def@fontsize{xiaowu}{9bp}
2573 \hit@def@fontsize{liuhao}{7.5bp}
2574 \hit@def@fontsize{xiaoliu}{6.5bp}
2575 \hit@def@fontsize{qihao}{5.5bp}
2576 \hit@def@fontsize{bahao}{5bp}
2577
2578
2579
2580
2581 %-- 设置字号 --%
2582 \ctexset{%
2583   section={
2584     afterindent=true,
2585     beforeskip={7.5bp},% 上下空 0.5 行
2586     afterskip={7.5bp},
2587     format={\heiti\ifhit@harbin\sihao[1.25]\else\xiaosan[1.25]\fi},
2588     aftername=\enspace,
2589     fixskip=true,
2590     break={},
2591   },
2592   subsection={
2593     afterindent=true,
2594     beforeskip={7bp},
2595     afterskip={7bp},
2596     format={\heiti\sihao[1.25]},
2597     aftername=\enspace,
2598     fixskip=true,
2599     break={},
2600   },
2601   subsubsection={
2602     afterindent=true,
2603     beforeskip={3bp},
2604     afterskip={3bp},
2605     format={\heiti\normalsize},
2606     aftername=\enspace,
2607     fixskip=true,
2608     break={},
2609   },
2610   paragraph/afterindent=true,
2611   subparagraph/afterindent=true

```

```

2612 }
2613
2614
2615
2616
2617 \def\hit@def@term#1{%
2618   \define@key{hit}{#1}{\csname #1\endcsname{##1}}
2619   \expandafter\gdef\csname #1\endcsname##1{%
2620     \expandafter\gdef\csname hit@#1\endcsname{##1}}
2621   \csname #1\endcsname{}}
2622
2623
2624 \hit@def@term{ctitlecover} % 中文标题封面
2625 \hit@def@term{csubject}
2626 \hit@def@term{cauthor}
2627 \hit@def@term{cstudentid}
2628 \hit@def@term{cclassid}
2629 \hit@def@term{caffil}
2630 \hit@def@term{csupervisor}
2631 \hit@def@term{cdate}
2632
2633
2634 \def\hit@parse@keywords#1{
2635   \define@key{hit}{#1}{\csname #1\endcsname{##1}}
2636   \expandafter\gdef\csname hit@#1\endcsname{}
2637   \expandafter\gdef\csname #1\endcsname##1{
2638     \@for\reserved@a:=##1\do{
2639       \expandafter\ifx\csname hit@#1\endcsname\@empty\else
2640         \expandafter\g@addto@macro\csname hit@#1\endcsname{%
2641           \ignorespaces\csname hit@#1separator\endcsname}
2642         \fi
2643         \expandafter\expandafter\expandafter\g@addto@macro%
2644         \expandafter\csname hit@#1\expandafter\endcsname\expandafter{\reserved@a}}}}
2645
2646 \def\hitsetup{\kvsetkeys{hit}}
2647
2648
2649
2650 \newcommand{\hit@report@titlepage@graduate}{
2651   \ifthenelse%
2652   {\equal{\hit@fontset}{siyuan}}%
2653   {\xiaosi[1]\vspace*{0.65em}}%
2654   {\xiaosi[1]\textcolor{rgb}{1,1,1}{\songti{\hit@hi}}}%
2655   \vspace*{10mm}
2656   \begin{center}
2657     \kaishu\xiaoer\textbf{\hit@cschoolname\ifhit@shenzhen\hit@shenzhencampus\fi}

```

```

2658 \end{center}
2659 \vspace{5mm}
2660 \begin{center}
2661   \songti\erhao\textbf{\hit@cxuewei\hit@cthesisname}
2662   \ifhit@opening
2663     \hit@stage@opening
2664   \else
2665     \ifhit@midterm
2666       \hit@stage@midterm
2667     \fi
2668     \fi
2669     \hit@stage@doctype
2670   }
2671 \end{center}
2672 \vspace{10mm}
2673 \parbox[t][3cm][t]{\textwidth}{
2674   \begin{center}
2675     \songti\xiaoer\textbf{\hit@cthesistitleprefix\hit@title@csep\hit@ctitlecover}
2676   \end{center}
2677 }
2678 \parbox[b][3cm][t]{\textwidth}{
2679   \begin{center}\songti\sanhao
2680   \renewcommand{\arraystretch}{2.1}
2681   \begin{tabular}{l@{\ \ }c}
2682     \textbf{\hit@graduate@caffiltitle} & \underline{\makebox[6.1cm]{\textbf{\hit@caffil}}}\\\
2683     \textbf{\hit@graduate@cmajortitle} & \underline{\makebox[6.1cm]{\textbf{\hit@csubject}}}\\\
2684     \textbf{\hit@graduate@supervisor} & \underline{\makebox[6.1cm]{\textbf{\hit@csupervisor}}}\\\
2685     \textbf{\hit@graduate@studenttitle} & \underline{\makebox[6.1cm]{\textbf{\hit@cauthor}}}\\\
2686     \textbf{\hit@graduate@studentid} & \underline{\makebox[6.1cm]{\textbf{\hit@cstudentid}}}\\\
2687     \textbf{\hit@graduate@datetitle} & \underline{\makebox[6.1cm]{\textbf{\hit@cdate}}}\\\
2688   \end{tabular}\renewcommand{\arraystretch}{1}
2689   \end{center}
2690 }
2691 \vfill
2692 \ifhit@harbin
2693   \hit@harbin@schoolbottommark
2694 \else
2695   \ifhit@shenzhen
2696     \hit@shenzhen@schoolbottommark
2697   \fi
2698   \fi
2699 }
2700
2701 \newcommand{\hit@report@titlepage@bachelor}{
2702   \ifthenelse%
2703     {\equal{\hit@fontset}{siyuan}}%

```

```

2704 {\xiaosi[1]\vspace*{0.65em}}%
2705 {\xiaosi[1]\textcolor[rgb]{1,1,1}{\songti{\hit@hi}}}%
2706 \vspace*{10mm}
2707 \begin{center}
2708   \includegraphics[width=6.2cm]{hitlogo}
2709 \end{center}
2710 \begin{center}
2711   \songti\xiaoyi\textbf{\hit@bachelor@cthesisname
2712     \ifhit@opening
2713     \hit@stage@opening
2714     \else
2715     \ifhit@midterm
2716     \hit@stage@midterm
2717     \fi
2718     \fi
2719     \hit@stage@doctype
2720   }
2721 \end{center}
2722 \vspace{15mm}
2723 \parbox[t][6.5cm][t]{\textwidth}{
2724   \begin{center}
2725     \songti\xiaoer\textbf{\hit@cthesis titleprefix\hit@title@csep\hit@ctitlecover}
2726   \end{center}
2727 }
2728 \parbox[b][6cm][t]{\textwidth}{
2729   \begin{center}\songti\sanhao
2730   \renewcommand{\arraystretch}{2.1}
2731   \begin{tabular}{l@{\ \ }c}
2732     \textbf{\hit@bachelor@cmajortitle} & \underline{\makebox[6.1cm]{\textbf{\hit@csubject}}}\\\
2733     \textbf{\hit@bachelor@cstudenttitle} & \underline{\makebox[6.1cm]{\textbf{\hit@cauthor}}}\\\
2734     \textbf{\hit@bachelor@cstudentidtitle} & \underline{\makebox[6.1cm]{\textbf{\hit@cstudentid}}}\\\
2735     \ifhit@weihai % 威海校区特有
2736     \textbf{\hit@bachelor@cclass} & \underline{\makebox[6.1cm]{\textbf{\hit@cclassid}}}\\\
2737     \fi
2738     \textbf{\hit@bachelor@csupervisortitle} & \underline{\makebox[6.1cm]{\textbf{\hit@csupervisor}}}\\\
2739     \textbf{\hit@bachelor@cdatetitle} & \underline{\makebox[6.1cm]{\textbf{\hit@cdate}}}\\\
2740   \end{tabular}\renewcommand{\arraystretch}{1}
2741   \end{center}
2742 }
2743 \vfill
2744 \ifhit@weihai
2745 \relax
2746 \else
2747 \hit@harbin@bachelor@schoolbottommark
2748 \fi
2749 }

```

```

2750
2751
2752
2753
2754 \newcommand{\hit@report@backpage@bachelor}{
2755   \thispagestyle{empty}
2756   \noindent\parbox[t][6.5cm][t]{\textwidth}{\hit@bachelor@teachercomment}
2757   \noindent\parbox[b][6cm][t]{\textwidth}{\hit@bachelor@teachersign\underline{\makebox[3cm]{} }\hfill\hit@bachelor@signature}
2758 }
2759
2760
2761
2762 \renewcommand\tableofcontents{%
2763   \thispagestyle{empty}
2764   \normalsize\@starttoc{toc}
2765 }
2766
2767
2768 \def\makecover{
2769   \begin{titlepage}
2770     \ifhit@bachelor
2771       \hit@report@titlepage@bachelor
2772     \else
2773       \hit@report@titlepage@graduate
2774     \fi
2775     \clearpage
2776     \ifhit@toc
2777       \tableofcontents
2778     \clearpage
2779     \fi
2780   \end{titlepage}
2781 }
2782 \def\makebackcover{
2783   \clearpage
2784   \hit@report@backpage@bachelor
2785 }
2786
2787
2788 \newcommand\bibstyle@numerical{\bibpunct{[ ]}{,}{s}{,}{\textsuperscript{,}}{,}}
2789 \newcommand\bibstyle@inline{\bibpunct{[ ]}{,}{n}{,}{\hit@inline@sep}}
2790
2791 \citestyle{numerical}
2792 \DeclareRobustCommand\inlinecite{\@inlinecite}
2793 \def\@inlinecite#1{\begingroup\citestyle{inline}\let\@cite\NAT@citenum\citep{#1}\endgroup}
2794 \let\onlinecite\inlinecite
2795

```

```

2796 \renewenvironment{thebibliography}[1]{%
2797   \list{\@biblabel{\@arabic\c@enumiv}}%
2798   {\renewcommand{\makelabel}[1]{##1\hfill}
2799    \settowidth{\labelwidth}{\@biblabel{#1}}
2800    \setlength{\labelsep}{0.5em}
2801    \setlength{\itemindent}{0pt}
2802    \setlength{\leftmargin}{\labelsep+\labelwidth}
2803    \addtolength{\itemsep}{-0.8em}
2804    \usecounter{enumiv}%
2805    \let\p@enumiv\@empty
2806   \renewcommand\theenumiv{\@arabic\c@enumiv}}%
2807   \sloppy\frenchspacing
2808   \flushbottom
2809   \clubpenalty0
2810   \@clubpenalty \clubpenalty
2811   \widowpenalty0%
2812   \interlinepenalty-50%
2813   \sfcode'\.\@m}
2814 {\def\@noitemerr
2815  {\@latex@warning{Empty 'thebibliography' environment}}}%
2816 \endlist\frenchspacing}
2817 \AtEndOfClass{\input{hithesisart.cfg}}
2818 \AtEndOfClass{\sloppy}
2819 </artcls>

```

4.2 定义选项

```
2820 <*bookcls>
```

此处添加 book 控制项，用于 cfg 中定理等控制

```

2821 \RequirePackage{ifthen}
2822 \RequirePackage{kvoptions}
2823 \SetupKeyvalOptions{
2824   family=hit,
2825   prefix=hit@,
2826   setkeys=\kvsetkeys}
2827 \newif\ifhit@bachelor
2828 \newif\ifhit@master
2829 \newif\ifhit@doctor
2830 \newif\ifhit@postdoc
2831 \define@key{hit}{type}{%
2832   \hit@bachelorfalse
2833   \hit@masterfalse
2834   \hit@doctorfalse
2835   \hit@postdocfalse
2836   \expandafter\csname hit@#1true\endcsname}

```

此处设置校区，没有明确给出威海或者深圳时候，默认为哈尔滨校区。

```

2837 \newif\ifhit@shenzhen
2838 \newif\ifhit@weihai
2839 \newif\ifhit@harbin
2840 \define@key{hit}{campus}{%
2841   \hit@shenzhenfalse
2842   \hit@weihaifalse
2843   \hit@harbinfalse
2844   \expandafter\csname hit@#1true\endcsname}
2845 \ifhit@weihai\relax\else
2846 \ifhit@shenzhen\relax\else
2847 \hit@harbintrue
2848 \fi
2849 \fi

```

设置版芯，由于窝工版芯歧义。

```

2850 \newif\ifhit@english
2851 \newif\ifhit@chinese
2852 \define@key{hit}{language}{%
2853   \hit@englishfalse
2854   \hit@chinesefalse
2855   \expandafter\csname hit@#1true\endcsname}
2856 \ifhit@english\relax\else
2857 \hit@chinesetrue
2858 \fi

2859 \newif\ifhit@geometrynewone
2860 \newif\ifhit@geometrynewtwo
2861 \define@key{hit}{newgeometry}{%
2862   \hit@geometrynewonefalse
2863   \hit@geometrynewtwofalse
2864   \expandafter\csname hit@geometrynew#1true\endcsname}

```

目录中英文是否用 Arial 字体（默认关闭）。

```
2865 \DeclareBoolOption[false]{arialtoc}
```

章节标题中的英文是否用 Arial 字体（默认打开）。

```
2866 \DeclareBoolOption[false]{arialtitle}
```

中文本科模板中章标题是否加粗，默认是

```
2867 \DeclareBoolOption[true]{chapterbold}
```

`raggedbottom` 选项（默认开启）。如果不开启这个选项，会出现一页中尽量上下对齐，段的间距大。如果开启，尽量使段间距保持一致，页面底部出现空白。

```
2868 \DeclareBoolOption[true]{raggedbottom}
```

在脚注标记中使用 `pifont` 的带圈数字（默认关闭）。

```
2869 \DeclareBoolOption[false]{pifootnote}
```

字体间距设置（默认关闭）。

```
2870 \DeclareBoolOption[false]{glue}
```

文科生四级目录设置（默认关闭）。

2871 `\DeclareBoolOption[false]{tocfour}`

目录中“目录”位置是否空行（默认开启）。

2872 `\DeclareBoolOption[true]{tocblank}`

章标题是否悬挂居中（默认开启）

2873 `\DeclareBoolOption[true]{chapterhang}`

是否是全日制学生（默认是）。

2874 `\DeclareBoolOption[true]{fulltime}`

是否有子标题（默认是）。

2875 `\DeclareBoolOption[false]{subtitle}`

是否开启 debug 模式（默认否）。如果开启，载入显示行号等的包，只为开发调试用。

2876 `\DeclareBoolOption[false]{debug}`

是否使用右开页（默认否）。

2877 `\DeclareBoolOption[false]{openright}`

是否为提交图书馆电子版。

2878 `\DeclareBoolOption[false]{library}`

图题和标题最后一行是否居中对其（默认是，非规范要求）。

2879 `\DeclareBoolOption[false]{capcenterlast}`

子图图题和标题最后一行是否居中对其（默认是，非规范要求）。

2880 `\DeclareBoolOption[false]{subcapcenterlast}`

中文目录中 Abstract 是否均为大写

2881 `\DeclareBoolOption[false]{absupper}`

此处添加控制本科论文的页码横线选项

2882 `\DeclareBoolOption[false]{bsmainpagenumberline}`

2883 `\DeclareBoolOption[false]{bsfrontpagenumberline}`

2884 `\DeclareBoolOption[true]{bsheadrule}`

数学字体是否使用新罗马

2885 `\DeclareBoolOption[true]{newtxmath}`

此处应广大刀客要求添加一参考文献分割开关

2886 `\DeclareBoolOption[false]{splitbibitem}`

声明字体选项。

2887 `\DeclareStringOption{fontset}`

将其余选项默认传递给 `ctexbook`。

2888 `\DeclareDefaultOption{\PassOptionsToClass{\CurrentOption}{ctexbook}}`

解析用户传递过来的选项，并加载 `ctexbook`。

2889 `\ProcessKeyvalOptions*`

使用 \XeTeX 引擎时，`fontspec` 宏包会被 `xeCJK` 自动调用。传递给 `fontspec` 宏包 `no-math` 选项，避免部分数学符号字体自动调整为 `CMR`。其他引擎下没有这个问题，这一行会被无视。

2890 `\PassOptionsToPackage{no-math}{fontspec}`

载入单双面打印设置，本、硕单面，博士双面。


```

2891 \ifhit@bachelor
2892 \PassOptionsToClass{oneside}{book}
2893 \fi
2894 \ifhit@master
2895 \PassOptionsToClass{oneside}{book}
2896 \fi
2897 \ifhit@doctor
2898 \PassOptionsToClass{twoside}{book}
2899 \fi

```

设置字体。由于宋体没有粗体，且我工模板的标题要求使用粗宋体，于是面临 CTeX 的经典的伪粗体 bug：“首次出现伪粗体字体之后的正常字体无法复制”。但如果使用自带宋体的思源字体，那么不必使用伪粗体。模板只给出了新 windows 字体的思源字体设置，且思源字体版本为 Adobe 版。

```

2900 \ifthenelse%
2901 {\equal{\hit@fontset}{}}{%
2902 {%
2903   \PassOptionsToPackage{AutoFakeBold=2}{xeCJK}
2904 }%
2905 {%
2906   \ifthenelse%
2907   {\equal{\hit@fontset}{siyuan}}{%
2908     {\relax}%
2909     {%
2910       \PassOptionsToPackage{AutoFakeBold=2}{xeCJK}
2911     }%
2912     \PassOptionsToClass{fontset=\hit@fontset}{ctexbook}
2913 }%

```

使用 ctexbook 类，优于调用 ctex 宏包。

```

2914 \LoadClass[a4paper,openany,UTF8,zihao=-4,scheme=plain]{ctexbook}

```

用户至少要提供一个选项，指定论文类型。

```

2915 \ifhit@bachelor\relax\else
2916 \ifhit@master\relax\else
2917 \ifhit@doctor\relax\else
2918 \ifhit@postdoc\relax\else
2919 \ClassError{hithesis}%
2920 {Please specify thesis type in option: \MessageBreak
2921 type=[bachelor | master | doctor | postdoc]}{}
2922 \fi
2923 \fi
2924 \fi
2925 \fi

```

4.3 装载宏包

引用的宏包和相应的定义。

```

2926 \RequirePackage{etoolbox}
2927 \RequirePackage{ifxetex}
2928 \ifxetex
2929 \else
2930     \ClassError{hithesis}%
2931         {Please use: \MessageBreak
2932             xelatex}{}
2933 \fi
2934 \RequirePackage{xparse}

```

\mathcal{AMS} - \TeX 宏包，用来排出更加漂亮的公式。

```

2935 \RequirePackage{amsmath}

```

定理类环境宏包，其中 `amsmath` 选项用来兼容 \mathcal{AMS} - \TeX 的宏包

```

2936 \RequirePackage[amsmath,thmmarks,hyperref]{ntheorem}
2937 \RequirePackage{amssymb}

```

`newtx` 设置 Times New Roman, Helvetica。

```

2938 \RequirePackage[defaultsup]{newtxtext}

```

添加数学字体开关

```

2939 \ifhit@newtxmath
2940 \RequirePackage{newtxmath}
2941 \fi

```

`newtx` 的 Mono 字体虽然很好看，但在论文中不常见。学校虽未要求 Mono 字体，还是选择常见的 Courier 字体。由于比较新的实现 \TeX Gyre Cursor 会修改 `\bfdefault`，导致中文加粗出问题，所以选用标准 `courier`。

```

2942 \RequirePackage{courier}

```

图形支持宏包。

```

2943 \RequirePackage{graphicx}

```

`pdfpages` 宏包便于我们插入扫描后的授权页和声明页 PDF 文档。

```

2944 \RequirePackage{pdfpages}
2945 \includepdfset{fitpaper=true}

```

更好的列表环境。

```

2946 \RequirePackage{enumitem}           % 使用 enumitem 宏包，改变列表项的格式
2947 \RequirePackage{environ}

```

禁止 \LaTeX 自动调整多余的页面底部空白，并保持脚注仍然在底部。脚注按页编号。

```

2948 \ifhit@raggedbottom
2949     \RequirePackage[bottom,perpage,hang]{footmisc}
2950     \raggedbottom
2951 \else
2952     \RequirePackage[perpage,hang]{footmisc}
2953 \fi

```

脚注格式。

```
2954 \ifhit@pifootnote
2955   \RequirePackage{pifont}
2956 \fi
```

利用 CJKfntef 实现汉字的下划线和盒子内两段对齐，并可以避免 `\makebox[⟨width⟩][⟨s⟩]` 可能产生的 underful boxes。

```
2957 \RequirePackage{CJKfntef}

    表格控制
```

```
2958 \RequirePackage{longtable}
```

使用三线表: `\toprule`, `\midrule`, `\bottomrule`。

```
2959 \RequirePackage{booktabs}
```

参考文献引用宏包。

```
2960 \RequirePackage[sort&compress]{natbib}
```

生成有书签的 pdf 及其开关，请结合 gbk2uni 避免书签乱码。

```
2961 \RequirePackage{hyperref}
2962 \hypersetup{%
2963   CJKbookmarks=true,
2964   linktoc=all,
2965   bookmarksnumbered=true,
2966   bookmarksopen=true,
2967   bookmarksopenlevel=1,
2968   breaklinks=true,
2969   colorlinks=false,
2970   plainpages=false,
2971   pdfborder=0 0 0}
```

设置 url 样式，与上下文一致

```
2972 \urlstyle{same}
```

4.4 页面设置

本来这部分应该是最容易设置的，但根据我工《哈尔滨工业大学研究生学位论文撰写规范》的 3.8,3.4,3.2 节的版芯矛盾，此处设置两种版芯。

```
2973 \ifhit@debug\RequirePackage[showframe]{geometry}\else\RequirePackage{geometry}\fi
2974 \geometry{% 根据 PlutoThesis 原版定义而来
2975   a4paper, % 210 * 297mm
2976   hcentering,
2977   ignoreall,
2978   nomarginpar,
2979 }
```

添加版芯设置选项

```
2980 \ifhit@geometrynewtwo%
```

```

2981 \geometry{
2982   centering,
2983   text={150true mm,236true mm},
2984   left=30true mm,
2985   head=5true mm,
2986   headsep=2true mm,
2987   footskip=0true mm,
2988   foot=5.2true mm
2989 }
2990 \else%
2991 \ifhit@geometrynewone%
2992 \geometry{
2993   centering,
2994   text={150true mm,240true mm},
2995   left=30true mm,
2996   head=5true mm,
2997   headsep=0true mm,
2998   footskip=0true mm,
2999   foot=0true mm
3000 }
3001 \else%
3002 \geometry{% 根据 PlutoThesis 原版定义而来
3003 text={150true mm,224true mm},
3004 top=35.5true mm,
3005 left=30true mm,
3006 head=5true mm,
3007 headsep=2.5true mm,
3008 foot=8.5true mm
3009 }
3010 \fi%
3011 \fi%

```

载入显示行号的包。

```

3012 \ifhit@debug%
3013 \RequirePackage{layout}
3014 \RequirePackage{layouts}
3015 \RequirePackage{lineno}
3016 \fi

```

利用 fancyhdr 设置页眉页脚。

```

3017 \RequirePackage{fancyhdr}

```

其他包，表格、数学符号包

```

3018 \RequirePackage{tabularx}
3019 \RequirePackage{varwidth}

```

此处 changepage 环境用来控制索引页面的左右边距，规范中给出的示例的边距要大于正文。

```

3020 \RequirePackage{changepage}

```

```

3021 \RequirePackage{multicol}
3022 \RequirePackage[below]{placeins}% 允许上一个 section 的浮动图形出现在下一个 section 的开始部
    分, 还提供\FloatBarrier 命令, 使所有未处理的浮动图形立即被处理
3023 \RequirePackage{flafter}          % 使得所有浮动体不能被放置在其浮动环境之前, 以免浮动体在引述它
    的文本之前出现.
3024 \RequirePackage{multirow}        % 使用 Multirow 宏包, 使得表格可以合并多个 row 格
3025 \ifhit@subcapcenterlast
3026 \PassOptionsToPackage{centerlast}{subfigure}
3027 \fi
3028 \RequirePackage{subfigure}% 支持子图 %centerlast 设置最后一行是否居中
3029 \RequirePackage[subfigure]{ccaption} % 支持双语标题

```

中英文索引包。

```

3030 \RequirePackage[makeindex]{splitidx}
3031 \newindex[] {china}
3032 \newindex[] {english}
3033 </bookcls>

```

我工要求的索引格式。

```

3034 <*ist>
3035 headings_flag 1
3036 heading_prefix "{\vskip -\baselineskip\centering\normalsize\textbf{"
3037 heading_suffix "\}\par}\nopagebreak\wuhao\n"
3038 delim_0 "\hspace*{\fill}"
3039 delim_1 "\hspace*{\fill}"
3040 </ist>

```

排版 logo。

```

3041 <bookcls>\RequirePackage{xltextra}

```

4.5 主文档格式

4.5.1 Three matters

`\cleardoublepage` 对于 *openright* 选项, 必须保证章首页右开, 且如果前章末页无内容须清空其页眉页脚。如果 *library* 为真, 则强制设置 *openright* 为真。

```

3042 <*bookcls>
3043 \ifhit@english
3044 \RequirePackage[xindy,order=letter]{glossaries-extra}
3045 \newglossarystyle{engstyle}{%
3046   \glossarystyle{long}%
3047   \renewenvironment{theglossary}%
3048     {\vspace{-\intextsep}\centering\begin{longtable}{@{\hskip 1cm}p{3.5cm}p{\glsdescwidth}}}%
3049     {\end{longtable}}}
3050 \setabbreviationstyle[acronym]{long-short}
3051 \else
3052 \RequirePackage{glossaries}

```

```

3053 \setacronymstyle{short-long}
3054 \fi
3055
3056 \renewcommand*{\genacrfullformat}[2]{%
3057   \glsentrylong{#1}%
3058 }
3059 \ifhit@english
3060 \makenoidxglossaries
3061 \else
3062 \makeglossaries
3063 \fi

3064 \ifhit@library\hit@openrightfalse\else\relax\fi
3065 \let\hit@cleardoublepage\cleardoublepage
3066 \newcommand{\hit@clearemdoublepage}{%
3067   \clearpage{\pagestyle{hit@empty}\hit@cleardoublepage}
3068 }
3069 \let\cleardoublepage\hit@clearemdoublepage

```

`\frontmatter` 我们的单面和双面模式与常规的不太一样。

```

3070 \renewcommand\frontmatter{%
3071   \ifhit@openright\cleardoublepage\else\clearpage\fi
3072   \@mainmatterfalse
3073   \pagenumbering{Roman}
3074   \pagestyle{hit@empty}
3075 }

```

`\mainmatter` 根据打印店（伪官方）的猛虎式操作，`\mainmatter` 命令的逻辑是，双面打印时第一章必须在奇数页（不看文档别怪我）。

```

3076 \renewcommand\mainmatter{%
3077   \ifhit@english
3078     \relax
3079   \else
3080     \ifhit@tocblank%
3081       \addtocontents{toc}{\vspace{\baselineskip}} % 规范中并没有这一要求，此处不应该加
3082       \addtocontents{toe}{\vspace{\baselineskip}}
3083     \fi%
3084   \fi

```

添加英文版限制

```

3085   \ifhit@doctor%
3086     \ifhit@library\clearpage\else\cleardoublepage\fi
3087   \else%
3088     \clearpage
3089   \fi%
3090   \@mainmattertrue
3091   \pagenumbering{arabic}

```

```
3092 \pagestyle{hit@headings}
3093 }
```

`\backmatter`

```
3094 \renewcommand\backmatter{%
3095 \ifhit@openright\cleardoublepage\else\clearpage\fi
3096 \@mainmattertrue}
3097 </bookcls>
```

4.5.2 字体

`\normalsize` 根据我工规定，正文小四号 (12bp) 字，行距为固定值 3–4mm。

```
3098 <*bookcls>
3099 \renewcommand\normalsize{%
3100 \@setfontsize\normalsize{12bp}{\ifhit@glue 20.50398bp \@plus 2.83465bp \@minus 0bp\else 20.50398bp\fi}
3101 \abovedisplayskip=8pt
3102 \abovedisplayshortskip=8pt
3103 \belowdisplayskip=\abovedisplayskip
3104 \belowdisplayshortskip=\abovedisplayshortskip}
```

WORD 中的字号对应该关系如下 (1bp = 72.27/72 pt) :

初号	42bp	14.82mm	42.1575pt
小初	36bp	12.70mm	36.135 pt
一号	26bp	9.17mm	26.0975pt
小一	24bp	8.47mm	24.09pt
二号	22bp	7.76mm	22.0825pt
小二	18bp	6.35mm	18.0675pt
三号	16bp	5.64mm	16.06pt
小三	15bp	5.29mm	15.05625pt
四号	14bp	4.94mm	14.0525pt
小四	12bp	4.23mm	12.045pt
五号	10.5bp	3.70mm	10.59375pt
小五	9bp	3.18mm	9.03375pt
六号	7.5bp	2.56mm	
小六	6.5bp	2.29mm	
七号	5.5bp	1.94mm	
八号	5bp	1.76mm	

`\hit@def@fontsize` 根据习惯定义字号。用法: `\hit@def@fontsize{< 字号 名称>}{< 磅数>}` 避免了字号选择和行距的紧耦合。所有字号定义时为单倍行距，并提供选项指定行距倍数。

```
3105 \def\hit@def@fontsize#1#2{%
3106 \expandafter\newcommand\csname #1\endcsname[1][1.3]{%
3107 \fontsize{#2}{##1\dimexpr #2}\selectfont}}
```

```

\dachu 一组字号定义。
\chuhao 3108 \hit@def@fontsize{dachu}{58bp}
\xiaochu 3109 \hit@def@fontsize{chuhao}{42bp}
\yihao 3110 \hit@def@fontsize{xiaochu}{36bp}
\xiaoyi 3111 \hit@def@fontsize{yihao}{26bp}
\erhao 3112 \hit@def@fontsize{xiaoyi}{24bp}
\xiaoer 3113 \hit@def@fontsize{erhao}{22bp}
\sanhao 3114 \hit@def@fontsize{xiaoer}{18bp}
\xiaosan 3115 \hit@def@fontsize{sanhao}{16bp}
\sihao 3116 \hit@def@fontsize{xiaosan}{15bp}
\banxiaosi 3117 \hit@def@fontsize{sihao}{14bp}
\xiaosi 3118 \hit@def@fontsize{banxiaosi}{13bp}
\dawu 3119 \hit@def@fontsize{xiaosi}{12bp}
\wuhao 3120 \hit@def@fontsize{dawu}{11bp}
\xiaowu 3121 \hit@def@fontsize{wuhao}{10.5bp}
\liuhao 3122 \hit@def@fontsize{xiaowu}{9bp}
\xiaoliu 3123 \hit@def@fontsize{liuhao}{7.5bp}
\qihao 3124 \hit@def@fontsize{xiaoliu}{6.5bp}
\bahao 3125 \hit@def@fontsize{qihao}{5.5bp}
3126 \hit@def@fontsize{bahao}{5bp}
3127 </bookcls>

```

4.5.3 页眉页脚

`\hit@empty` 定义三种页眉页脚格式：

- `hit@empty`: 页眉页脚都没有
- `hit@plain`: 只显示页脚的页码。`\chapter` 自动调用 `\thispagestyle{hit@plain}`。
- `hit@headings`: 页眉页脚同时显示

```

3128 <*bookcls>
3129 \let\hit@headrule\headrule
3130 \fancypagestyle{hit@empty}{%
3131   \fancyhf{}
3132   \let\headrule\hit@headrule%
3133   \renewcommand{\headrulewidth}{0pt}
3134   \renewcommand{\footrulewidth}{0pt}
3135 }

```

此处根据本科生模板的多种版本，提供选项自定义页码、页眉样式。

```

3136 \fancypagestyle{hit@headings}{%
3137   \fancyhf{}
3138   \ifhit@english
3139     \fancyhead[C]{\xiaowu[0]\leftmark}
3140     \fancyfoot[C]{\xiaowu--\thepage--}
3141     \renewcommand{\headrule}{
3142       \vskip 1.190132pt
3143       \hrule{@height2.276208pt@width\headwidth

```



```

3144      \vskip 0.75pt
3145      \hrule\@height.75pt\@width\headwidth
3146    }
3147  \else

```

添加英文版页眉格式控制

```
3148  \ifhit@postdoc
```

添加博后页眉控制

```

3149  \fancyhead[CO]{\songti\xiaowu[0]\leftmark}
3150  \fancyhead[CE]{\songti\xiaowu[0]\hit@cschoolname\hit@postdoc@documenttitlenospace}
3151  \fi
3152  \ifhit@doctor
3153  \fancyhead[CO]{\songti\xiaowu[0]\leftmark}
3154      \ifhit@harbin
3155          \fancyhead[CE]{\songti\xiaowu[0]\hit@cschoolname\hit@cdegree\hit@cthesisname}
3156      \fi
3157      \ifhit@shenzhen
3158          \fancyhead[CE]{\songti\xiaowu[0]\hit@cschoolname\hit@shenzhencampus\hit@cdegree\hit@cthesisname}
3159      \fi
3160      \ifhit@weihai
3161          \fancyhead[CE]{\songti\xiaowu[0]\hit@cschoolname\hit@weihai-campus\hit@cdegree\hit@cthesisname}
3162      \fi
3163  \else
3164      \ifhit@master
3165          \ifhit@harbin
3166              \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@cdegree\hit@cthesisname}
3167          \fi
3168          \ifhit@shenzhen
3169              \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@shenzhencampus\hit@cdegree\hit@cthesisname}
3170          \fi
3171          \ifhit@weihai
3172              \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@weihai-campus\hit@cdegree\hit@cthesisname}
3173          \fi
3174      \fi
3175  \fi
3176  \ifhit@bachelor
3177      \ifhit@harbin
3178          \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@bachelor@cxuewei\hit@bachelor@cthesisname}
3179      \fi
3180      \ifhit@shenzhen
3181          \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@shenzhencampus\hit@bachelor@cxuewei\hit@bachelor@cthesisname}
3182      \fi
3183      \ifhit@weihai
3184          \ifhit@bachelor

```

此处设置威海本科页眉与本部一样，窝工三个校区规范怎么这么乱???

```
3185      \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@bachelor@cxuewei\hit@bachelor@cthesisname}
```

```

3186         \else
3187             \fancyhead[C]{\songti\xiaowu[0]\hit@cschoolname\hit@weihaicampus\hit@bachelor@cxuewei\hit@ba
3188         \fi
3189     \fi
3190     \fancyfoot[C]{\xiaowu\if@mainmatter\ifhit@bsmainpagenumberline~~\thepage~~\else\thepage\fi\else\
3191     \ifhit@bsheadrule
3192         \renewcommand{\headrule}{
3193             \vskip 1.190132pt
3194             \hrule\@height2.276208pt\@width\headwidth
3195             \vskip 0.75pt
3196             \hrule\@height.75pt\@width\headwidth
3197         }
3198     \else
3199         \renewcommand{\headrulewidth}{0pt}
3200     \fi
3201 \else
3202     \fancyfoot[C]{\xiaowu~~\thepage~~}
3203     \renewcommand{\headrule}{
3204         \vskip 1.190132pt
3205         \hrule\@height2.276208pt\@width\headwidth
3206         \vskip 0.75pt
3207         \hrule\@height.75pt\@width\headwidth
3208     }
3209 \fi

```

添加一校三区的学校名

```

3210 \fi
3211 % 此处可能和 word 模板不一致
3212 % 页眉中小五汉字,0 行距时,占用 9bt,页眉高度为 14pt,所以下数字之和要保持等于 14pt-9bt=4.96634pt
3213 % 根据 PlutoThesis 模板中 rule 宽度定义为 2.25, 0.75, 保持粗线和细线之间的间距为细线宽度。
3214 % 如果页眉是多行的情况, rule 向下溢出
3215 \renewcommand{\footrulewidth}{0pt}
3216 }
3217 \AtBeginDocument{% 此处解决页眉经典 bug
3218     \pagestyle{hit@empty}
3219     \renewcommand{\chaptermark}[1]{\@mkboth{\CTEXthechapter\enspace#1}{}}
3220 </bookcls>

```

4.5.4 段落

全文首行缩进 2 字符, 标点符号用全角

```

3221 <*bookcls>
3222 \ctexset{%
3223     punct=quanjiao,
3224     space=auto,
3225     autoindent=true}

```

利用 `enumitem` 命令调整默认列表环境间的距离，以符合中文习惯。

```
3226 \setlist{nosep}
3227 </bookcls>
```

4.5.5 脚注

脚注符合中文习惯，数字带圈。

```
3228 <*bookcls>
3229 \def\hit@textcircled#1{%
3230   \ifnum\value{#1} >9
3231     \ClassError{hithesis}%
3232     {Too many footnotes in this page.}{Keep footnote less than 10.}
3233   \fi
3234   \ifhit@pifootnote%
3235     \ding{\the\numexpr\value{#1}+171\relax}%
3236   \else%
3237     \textcircled{\xiaoliu\arabic{#1}}%
3238   \fi}
3239 \renewcommand{\thefootnote}{\hit@textcircled{footnote}}
3240 \renewcommand{\thempfootnote}{\hit@textcircled{mpfootnote}}
```

定义脚注分割线，字号（宋体小五），以及悬挂缩进（1.5 字符）。

```
3241 \def\footnoterule{\vskip-3\p@\hrule\@width0.3\textwidth\@height0.4\p@\vskip2.6\p@}
3242 \let\hit@footnotesize\footnotesize
3243 \renewcommand\footnotesize{\hit@footnotesize\xiaowu[1.5]}
3244 \footnotemargin1.5em\relax
```

`\@makefnmark` 默认是上标样式，而在脚注部分要求为正文大小。利用 `\patchcmd` 动态调整 `\@makefnmark` 的定义。

```
3245 \let\hit@makefnmark\@makefnmark
3246 \def\hit@makefnmark{\hbox{\normalfont\@thefnmark}}
3247 \pretocmd{\@makefnmark}{\let\hit@makefnmark\hit@makefnmark}{}{}
3248 \apptocmd{\@makefnmark}{\let\hit@makefnmark\hit@makefnmark}{}{}
3249 </bookcls>
```

4.5.6 数学相关

允许太长的公式断行、分页等。

```
3250 <*bookcls>
3251 \allowdisplaybreaks[4]
3252 \predisplayskip=0pt % 公式之前可以换页，公式出现在页面顶部
3253 \postdisplayskip=0pt
3254 \renewcommand\theequation{\ifnum \c@chapter>\z@ \thechapter-\fi\arabic{equation}}
```

公式距前后文的距离由 4 个参数控制，参见 `\normalsize` 的定义。同时为了让 `amsmath` 的 `\tag*` 命令得到正确的格式，我们必须修改这些代码。`\makeatdf@tag` 是定义 `\tag*` 和 `\tag` 内部命令的。`\makeatdf@tag@@` 处理 `\tag*`，我们就改它！

```

\def\make@df@tag{\@ifstar\make@df@tag@@\make@df@tag@@@}
\def\make@df@tag@@#1{%
  \gdef\df@tag{\maketag@@@{#1}\def\@currentlabel{#1}}

```

```

3255 \def\make@df@tag{\@ifstar\hit@make@df@tag@@\make@df@tag@@@}
3256 \def\hit@make@df@tag@@#1{\gdef\df@tag{\hit@maketag{#1}\def\@currentlabel{#1}}}
3257 \iffalse
3258 \ifhit@bachelor
3259   \def\hit@maketag#1{\maketag@@@{#1}\gdef\df@tag{\hit@maketag{#1}\def\@currentlabel{#1}}}
3260   (\ignorespaces\text{\equationname\hskip0.5em}#1\unskip\@italiccorr)}
3261   \def\tagform@#1{\maketag@@@{#1}\gdef\df@tag{\hit@maketag{#1}\def\@currentlabel{#1}}}
3262   (\ignorespaces\text{\equationname\hskip0.5em}#1\unskip\@italiccorr)\equcaption{#1}}
3263 \fi
3264 \fi
3265 \def\hit@maketag#1{\maketag@@@{#1}\gdef\df@tag{\hit@maketag{#1}\def\@currentlabel{#1}}}
3266 \def\tagform@#1{\maketag@@@{#1}\gdef\df@tag{\hit@maketag{#1}\def\@currentlabel{#1}}}

```

修改 `\tagform` 会影响 `\eqref`。

```

3267 \renewcommand{\eqref}[1]{\textup{(\ref{#1})}}
3268 </bookcls>

```

定理标题使用黑体，正文使用宋体，冒号隔开。

```

3269 <*bookcfg>
3270 \theorembodyfont{\normalfont}
3271 \ifhit@english
3272 \theoremheaderfont{\normalfont\bf}
3273 \else
3274 \theoremheaderfont{\normalfont\heiti}
3275 \fi

```

英文版黑体加粗

```

3276 \theoremsymbol{\ensuremath{\square}}
3277 \theoremstyle{plain}
3278 \theoremsymbol{}

```

此处去除了冒号，（如果需要在加上这个冒号?），反正规范中没有。

```

3279 \theoremseparator{}
3280 \ifhit@english
3281 \newtheorem{assumption}{Assumption}[chapter]
3282 \newtheorem{definition}{Definition}[chapter]
3283 \newtheorem{proposition}{Proposition}[chapter]
3284 \newtheorem{lemma}{Lemma}[chapter]
3285 \newtheorem{theorem}{Theorem}[chapter]
3286 \newtheorem{axiom}{Axiom}[chapter]
3287 \newtheorem{corollary}{Corollary}[chapter]
3288 \newtheorem{exercise}{exercise}[chapter]
3289 \newtheorem{example}{Example}[chapter]
3290 \newtheorem{remark}{Remark}[chapter]

```

```

3291 \newtheorem{problem}{Problem}[chapter]
3292 \newtheorem{conjecture}{Conjecture}[chapter]
3293 \newtheorem{fact}{Fact}[chapter]
3294 \newtheorem*{proof}{Proof}
3295 \else
3296 \newtheorem{assumption}{假设}[chapter]
3297 \newtheorem{definition}{定义}[chapter]
3298 \newtheorem{proposition}{命题}[chapter]
3299 \newtheorem{lemma}{引理}[chapter]
3300 \newtheorem{theorem}{定理}[chapter]
3301 \newtheorem{axiom}{公理}[chapter]
3302 \newtheorem{corollary}{推论}[chapter]
3303 \newtheorem{exercise}{练习}[chapter]
3304 \newtheorem{example}{例}[chapter]
3305 \newtheorem{remark}{注释}[chapter]
3306 \newtheorem{problem}{问题}[chapter]
3307 \newtheorem{conjecture}{猜想}[chapter]
3308 \newtheorem{fact}{事实}[chapter]
3309 \newtheorem*{proof}{证明}
3310 \fi
3311 </bookcfg>
3312 <*artcfg>
3313 \theorembodyfont{\normalfont}
3314 \theoremheaderfont{\normalfont\heiti}
3315 \theoremsymbol{\ensuremath{\square}}
3316 \newtheorem*{proof}{证明}
3317 \theoremstyle{plain}
3318 \theoremsymbol{}
3319 \theoremseparator{}
3320 \newtheorem{assumption}{假设}
3321 \newtheorem{definition}{定义}
3322 \newtheorem{proposition}{命题}
3323 \newtheorem{lemma}{引理}
3324 \newtheorem{theorem}{定理}
3325 \newtheorem{axiom}{公理}
3326 \newtheorem{corollary}{推论}
3327 \newtheorem{exercise}{练习}
3328 \newtheorem{example}{例}
3329 \newtheorem{remark}{注释}
3330 \newtheorem{problem}{问题}
3331 \newtheorem{conjecture}{猜想}
3332 \ctexset{%
3333   contentsname={目\hspace{\ccwd} 录},
3334   figurename= 图,
3335   tablename= 表
3336 }

```

```

3337 \let\CJK@todaysave=\today
3338 \def\CJK@todaysmall@short{\the\year 年 \the\month 月}
3339 \def\CJK@todaysmall{\the\year 年 \the\month 月 \the\day 日}
3340 \def\CJK@todaybig@short{\zhdigits{\the\year} 年\zhnumber{\the\month} 月}
3341 \def\CJK@todaybig{\zhdigits{\the\year} 年\zhnumber{\the\month} 月\zhnumber{\the\day} 日}
3342 \def\CJK@today{\CJK@todaysmall}
3343 \renewcommand\today{\CJK@today}
3344 \newcommand\CJKtoday[1][1]{%
3345   \ifcase#1\def\CJK@today{\CJK@todaysave}
3346   \or\def\CJK@today{\CJK@todaysmall}
3347   \or\def\CJK@today{\CJK@todaybig}
3348   \fi}
3349 \cdate{\ifhit@bachelor\CJK@todaysmall\else\CJK@todaysmall@short\fi}
3350 \ifhit@doctor
3351 \gdef\hit@cxuweishort{博}
3352 \gdef\hit@cxuewei{\hit@cxuweishort 士}
3353 \gdef\hit@cdegree{\hit@cxueke\hit@cxuewei}
3354 \def\hit@cauthortitle{\hit@cxuweishort 士研究生}
3355 \fi
3356 \ifhit@master
3357 \gdef\hit@cxuweishort{硕}
3358 \gdef\hit@cxuewei{\hit@cxuweishort 士}
3359 \gdef\hit@cdegree{\hit@cxueke\hit@cxuewei}
3360 \def\hit@cauthortitle{\hit@cxuweishort 士研究生}
3361 \fi
3362 \ifhit@bachelor
3363 \gdef\hit@cxuewei{学士}
3364 \fi
3365 \def\hit@stage@opening{开题}
3366 \def\hit@stage@midterm{中期}
3367 \def\hit@stage@doctype{报告}
3368 \def\hit@bachelor@cxuewei{本科}
3369 \def\hit@bachelor@cthesisname{毕业设计（论文）}
3370 \def\hit@bachelor@cmajortitle{专\hspace{2\ccwd} 业}
3371 \def\hit@bachelor@cstudenttitle{学\hspace{2\ccwd} 生}
3372 \def\hit@bachelor@cstudentidtitle{学\hspace{2\ccwd} 号}
3373 \def\hit@bachelor@cclass{班\hspace{2\ccwd} 号}
3374 \def\hit@bachelor@caffilttitle{院（系）}
3375 \def\hit@bachelor@caffiltitlesz{学院}
3376 \def\hit@bachelor@caffilttitlewh{学院}
3377 \def\hit@bachelor@csupervisortitle{指导教师}
3378 \def\hit@bachelor@cdate{日\hspace{2\ccwd} 期}
3379 \newcommand{\hit@bachelor@teachercomment}{指导教师评语：}
3380 \newcommand{\hit@bachelor@teachersign}{指导教师签字：}
3381 \newcommand{\hit@bachelor@checkdate}{检查日期：}
3382 \def\hit@cthesisitleprefix{题\hspace{\ccwd} 目}

```

```

3383 \def\hit@graduate@caffiltitle{院\hspace{3\ccwd} (系) }
3384 \def\hit@graduate@cmajortitle{学\hspace{4\ccwd} 科}
3385 \def\hit@graduate@supervisor{导\hspace{4\ccwd} 师}
3386 \def\hit@graduate@studenttitle{研\hspace{1.5\ccwd} 究\hspace{1.5\ccwd} 生}
3387 \def\hit@graduate@studentid{学\hspace{4\ccwd} 号}
3388 \def\hit@graduate@datetitle{\ifhit@opening\hit@stage@opening
3389 \else\ifhit@midterm\hit@stage@midterm\fi\fi\hit@stage@doctype 日期}
3390 \def\hit@graduate@enrolldate{入\hspace{0.666666\ccwd} 学\hspace{0.666666\ccwd} 时\hspace{0.666666\ccwd}
    间}
3391 \def\hit@graduate@thesistitle{论\hspace{0.666666\ccwd} 文\hspace{0.666666\ccwd} 题\hspace{0.666666\ccwd}
    目}
3392 \def\hit@graduate@cafflimajor{学\hspace{0.666666\ccwd} 科\hspace{0.666666\ccwd} 专\hspace{0.666666\ccwd}
    业}
3393 \def\hit@cschoolname{哈尔滨工业大学}
3394 \def\hit@shenzhencampus{(深圳) }
3395 \def\hit@cthesisname{学位论文}
3396 \def\hit@cthesis midtermcheck{博\hspace{.125\ccwd} 士\hspace{.125\ccwd} 学\hspace{.125\ccwd}
    位\hspace{.125\ccwd} 论\hspace{.125\ccwd} 文\hspace{.125\ccwd} 中\hspace{.125\ccwd} 期\hspace{.125\ccwd}
    检\hspace{.125\ccwd} 查\hspace{.125\ccwd} 报\hspace{.125\ccwd} 告}
3397 \def\hit@weihaicampus{(威海) }
3398 \def\hit@cschoolnametitle{授予学位单位}
3399 \def\hit@cdate{答辩日期}
3400 \def\hit@caffiltitle{所在单位}
3401 \def\hit@csubjecttitle{学科}
3402 \def\hit@cdegreetitle{申请学位}
3403 \def\hit@csupervisortitle{导师}
3404 \def\hit@cassosupervisortitle{副导师}
3405 \def\hit@ccosupervisortitle{联合导师}
3406 \def\hit@title@csep{: }
3407 \def\hit@natclassifiedindex{国内图书分类号}
3408 \def\hit@internatclassifiedindex{国际图书分类号}
3409 \def\hit@secretlevel{密级}
3410 \def\hit@schoolid{学校代码}
3411 \def\hit@schoolid{10213}
3412 \newcommand{\hit@authorsig}{作者签名: }
3413 \newcommand{\hit@teachersig}{导师签名: }
3414 \newcommand{\hit@frontdate}{日期: }
3415 \newcommand{\hit@authorizationtitle}{学位论文使用权限}
3416 \newcommand{\hit@shenzhen@schoolbottommark}{
3417     \begin{center}
3418         \songti\sanhao\textbf{哈工大(深圳)制}
3419     \end{center}
3420     \begin{center}
3421         \songti\sanhao\textbf{二〇一二年三月}
3422     \end{center}
3423 }

```

```

3424 \newcommand{\hit@harbin@schoolbottommark}{
3425   \begin{center}
3426     \songti\sanhao\textbf{研究生院制}
3427   \end{center}
3428   \begin{center}
3429     \songti\sanhao\textbf{二〇一四年九月}
3430   \end{center}
3431 }
3432 \newcommand{\hit@harbin@bachelor@schoolbottommark}{
3433   \begin{center}
3434     \lishu\xiaoer\textbf{哈尔滨工业大学教务处制}
3435   \end{center}
3436 }
3437 \newcommand{\hit@shenzhen@doctor@midterm@note}{
3438 \thispagestyle{empty}
3439 {\begin{center}
3440 \songti\sanhao\textbf{说\hspace{4\ccwd} 明}
3441 \end{center}
3442 }
3443 \vspace{1cm}\songti\sihao[2]
3444 \begin{enumerate}[itemsep=-4bp]
3445 \item 博士研究生学位论文中期报告一般在入学后的第五学期末完成。
3446 \item 此报告由学生本人填写，请导师签字后提交一份给检查小组。答辩结束后由检查组长签署意见。
3447 \item 报告经中期报告检查组长签字同意后，由学科部保存，以备论文答辩时参考。研究生院学生培养处将对研究生的学位论文中期报告进行抽查。
3448 \item 报告统一用 A4 纸打印。
3449 \end{enumerate}
3450 }
3451 \newcommand{\hit@datefill}{\hspace{2.5em} 年\hspace{1.5em} 月\hspace{1.5em} 日}
3452 \def\hit@hi{嗨! thesis}
3453 \def\hithesis{\textsc{hi}}-\textsc{Thesis}}
3454 \def\hit{哈尔滨工业大学}
3455 \artcf{g}

```

4.5.7 浮动对象以及表格

设置浮动对象和文字之间的距离，由于规范中没有明确规定，根据经验，设置成正文汉字高度。

```

3456 \bookcls
3457 \ifhit@postdoc
3458 \setlength{\intextsep}{10.5bp}
3459 \setlength{\textfloatsep}{10.5bp}
3460 \setlength{\floatsep}{10.5bp}

```

添加博后的浮动间距设置

```

3461 \else

```



```

3462 \setlength{\intextsep}{\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp\else 8.50398bp\fi}
3463 \setlength{\textfloatsep}{\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp\else 8.50398bp\fi}
3464 \setlength{\floatsep}{\ifhit@glue 12bp \@plus 2.83465bp \@minus 0bp\else 12bp\fi}
3465 \fi

```

此处设置 float 在 p 选项时间隔，此处不设置 \@fptop 和 \@fpbot 以确保居中。下面这组命令使浮动对象的缺省值稍微宽松一点，从而防止幅度对象占据过多的文本页面，也可以防止在很大空白的浮动页上放置很小的图形。

```

3466 \g@addto@macro\appendix{\renewcommand*\thechapter{\arabic{figure}}}
3467 \g@addto@macro\appendix{\renewcommand*\thetable{\thechapter-\arabic{table}}}
3468 \g@addto@macro\appendix{\renewcommand*\theequation{\thechapter-\arabic{equation}}}
3469 \renewcommand{\textfraction}{0.15}
3470 \renewcommand{\topfraction}{0.85}
3471 \renewcommand{\bottomfraction}{0.65}
3472 \renewcommand{\floatpagefraction}{0.60}

```

由于我工的双标题，导致标题之下多出一空白字符的距离，去除。

`\@makecaption` 根据我工规范，本科和硕博的图题序号之后的空格不一样。《哈尔滨工业大学研究生学位论文撰写规范》2.13.1 中规定：“每个图均应有图题（由图序和图名组成），图题不宜有标点符号，图名在图序之后空 1 个半角字符排写。”《哈尔滨工业大学本科生毕业论文撰写规范》2.13.1 中规定：“每个图均应有图题（由图序和图名组成），图题不宜有标点符号，图名在图序之后空 1 个字符排写。”我工规范中没有明确规定是否标题是否居中对齐，这里给出一个居中选项自行调整。注意，我工只规定：“居中书写”。此处不额外添加悬挂处理。

```

3473 \long\def\@makecaption#1#2{%
3474   \vskip\abovecaptionskip
3475   \wuhao\setbox\@tempboxa{\ifhit@bachelor\hskip\ccwd\else\enskip\fi#2}%
3476   \ifdim \wd\@tempboxa >\hsize
3477     \ifhit@capcenterlast%
3478     \vskip 6.3bp%
3479     {\setbox0=\vbox{\ifhit@bachelor\hskip\ccwd\else\enskip\fi#2}
3480      \setbox1=\vbox{%
3481        \unvbox0
3482        \setbox2=\lastbox
3483        \hbox to \textwidth{\hfill\unhcopy2 \unskip\unskip\hfill}
3484      }
3485      \unvbox1}
3486     \else%
3487     #1\ifhit@bachelor\hskip\ccwd\else\enskip\fi#2%
3488     \fi%
3489     \par
3490   \else
3491     \global \@minipagefalse
3492     \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
3493     \fi
3494   \vskip\belowcaptionskip}

```

`\LT@makecaption` 有关 `longtable` 的 `caption` 支持

```

3495 \long\def\LT@makecaption#1#2#3{%
3496   \LT@mcol\LT@cols c{\hbox to\z@{\hss\parbox[t]\LTcapwidth{%
3497     \wuhao\sbox\@tempboxa{#1{#2\ifhit@bachelor\hskip\ccwd\else\enskip\fi }#3}%
3498     \ifdim\wd\@tempboxa>\hsize
3499       \ifhit@capcenterlast%
3500         \vskip 6.3bp%
3501         {\setbox0=\vbox{#1{#2\ifhit@bachelor\hskip\ccwd\else\enskip\fi }#3}
3502          \setbox1=\vbox{%
3503            \unvbox0
3504            \setbox2=\lastbox
3505            \hbox to \textwidth{\hfill\unhcopy2 \unskip\unskip\hfill}
3506          }
3507          \unvbox1}
3508       \else%
3509         #1{#2\ifhit@bachelor\hskip\ccwd\else\enskip\fi }#3%
3510       \fi%
3511       \par
3512     \else
3513       \global \@minipagefalse
3514       \hbox to\hsize{\hfil\box\@tempboxa\hfil}
3515     \fi
3516   \endgraf\vskip\belowcaptionskip}%
3517 \hss}}}
```

`\longbionenumcaption` 长表格的双语标题是一个坑。因为第一不能用浮动格式，只能用 `longtable` 包中的 `tabular`，这样表题只能使用表格中前两行来写。这样出现了一个问题是，中英表题的间距，标题和表第一行间距，表格内部间距等多个变量的协调问题。这个问题只要使用 `tabular` 的形式，就是无解的。唯一的方法就是把这些参数都给用户列出来。以下，第 2, 5 参数为中英双语标题内容，1, 4 为标题参数。6 为中英标题间距，7 为表题和表格间距。

```

3518 \renewcommand*{\longbionenumcaption}[7]{%
3519   \@if@contemptyarg{#1}{\caption{#2}}{\caption[#1]{#2}}%
3520   \global\let\@cont@oldtablename\tablename
3521   \gdef\tablename{#3}
3522   \global\let\LT@c@ption\@cont@LT@nonumintoc
3523   \[\[#6]
3524   \@if@contemptyarg{#4}{\caption{#5}}{\caption[#4]{#5}}%
3525   \global\let\tablename\@cont@oldtablename
3526   \global\let\LT@c@ption\@cont@oldLT@c@ption
3527   \vspace{#7}}}
```

`\ltfontsize` 我们采用 `longtable` 来处理跨页的表格。同样我们需要设置其默认字体为五号，行距设置为 1.3 倍行距。此处还需要提供一个设置长表格内部字体的命令。

```

3528 \let\hit@LT@array\LT@array
3529 \def\LT@array{\wuhao\hit@LT@array} % set default font size
```

```
3530 \newcommand{\ltfontsize}[1]{\def\LT@array{#1\hit@LT@array}}
```

图表名称及格式。

```
3531 \renewcommand{\thesubtable}{(\alph{subtable})}
3532 \renewcommand{\thefigure}{\arabic{chapter}-\arabic{figure}}% 使图编号为 7-1 的格式 %\protect{~}
3533 \renewcommand{\thesubfigure}{\alph{subfigure}})% 使子图编号为 a) 的格式
3534 \renewcommand{\p@subfigure}{\thefigure~}% 使子图引用为 7-1 a) 的格式, 母图编号和子图编号之间
    用 ~ 加一个空格
3535 \renewcommand{\thetable}{\arabic{chapter}-\arabic{table}}% 使表编号为 7-1 的格式
```

调整罗列环境、浮动格式、间距。

```
3536 \setitemize{leftmargin=0em,itemsep=0em,partopsep=0em,parsep=0em,topsep=0em,itemindent=3em}
3537 \setenumerate{leftmargin=0em,itemsep=0em,partopsep=0em,parsep=0em,topsep=0em,itemindent=3.5em}
3538 \newcommand{\citeup}[1]{\textsuperscript{\cite{#1}}}
```

此处删除 hang caption 的设置

```
3539 \captionnamefont{\wuhao}
3540 \captiontitlefont{\wuhao}
3541 \renewcommand{\subcapsize}{\wuhao}
3542 \setlength{\abovecaptionskip}{0pt}% 为了双标题之间的间距, 不能设置
3543 \setlength{\belowcaptionskip}{0pt}
3544 % 自定义项目列表标签及格式 \begin{publist} 列表项 \end{publist}
3545 \newcounter{pubctr} % 自定义新计数器
3546 \newenvironment{publist}{%%%% 定义新环境
3547 \begin{list}{[\arabic{pubctr}]} %% 标签格式
3548     {
3549     \usecounter{pubctr}
3550     \setlength{\leftmargin}{1.7em} % 左边界 \leftmargin = \itemindent + \labelwidth + \labelsep
3551     \setlength{\itemindent}{0em} % 标号缩进量
3552     \setlength{\labelsep}{0.5em} % 标号和列表项之间的距离, 默认 0.5em
3553     \setlength{\rightmargin}{0em} % 右边界
3554     \setlength{\topsep}{0ex} % 列表到上下文的垂直距离
3555     \setlength{\parsep}{0ex} % 段落间距
3556     \setlength{\itemsep}{0ex} % 标签间距
3557     \setlength{\listparindent}{0pt} % 段落缩进量
3558     }
3559 \end{list}}
```

设置定理定义格式

```
3560 \renewtheoremstyle{plain}
3561 {\item[\hspace\labelsep \theorem@headerfont ##1\ ##2\theorem@separator]}
3562 {\item[\hspace\labelsep \theorem@headerfont ##1\ ##2\ ##3\theorem@separator]}
3563 \theorembodyfont{\songti\rmfamily}
3564 \theoremheaderfont{\heiti\rmfamily}
3565 \theoremsymbol{$\square$}
3566 \setlength{\theorempreskipamount}{0pt}
3567 \setlength{\theorempostskipamount}{-2pt}
3568 \setlength{\parindent}{2em}
```

```

3569 \arraycolsep=1.6pt
3570 </bookcls>

```

4.5.8 章节标题

```

3571 <*bookcfg>
3572 \ifhit@english
3573 \ctexset{%
3574   chapter/name={Chapter\enskip},,
3575   appendixname={Appendix},
3576   contentsname={Contents},
3577   listfigurename={List of Figures},
3578   listtablename={List of Tables},
3579   figurename={Figure},
3580   tablename={Table},
3581   bibname={References},
3582 }
3583 \else
3584 \ctexset{%
3585   chapter/name={第, 章},
3586   appendixname= 附录,
3587   contentsname={目\hspace{\ccwd} 录},
3588   listfigurename= 插图索引,
3589   listtablename= 表格索引,
3590   figurename= 图,
3591   tablename= 表,
3592   bibname= 参考文献,
3593   indexname= 索引,
3594 }
3595 \fi
3596 \ifhit@postdoc
3597 \ctexset{
3598   contentsname={目录},
3599 }
3600 \fi

```

添加 Article 和 English 版本以及 postdoc 版本标题名称设置

```

3601 \ifhit@english
3602 \newcommand\equationname{Equation}
3603 \else
3604 \newcommand\equationname{公式}
3605 \fi
3606 \newcommand\listfigurename{Index of figure}
3607 \newcommand\listtablename{Index of table}
3608 \newcommand\listequationname{Index of equation}
3609 \newcommand\listequationname{公式索引}

```

设置英文版公式名称

```
3610 \newcommand{\cabstractename}{Abstract (In Chinese)}
```

此处删除冗余选项

```
3611 \newcommand{\eabstractname}{Abstract}
```

```
3612 \newcommand{\eabstractename}{Abstract (In English)}
```

```
3613 \ifhit@postdoc
```

```
3614 \newcommand{\cabstractcname}{摘要}
```

```
3615 \else
```

```
3616 \newcommand{\cabstractcname}{摘\hspace{\ccwd} 要}
```

```
3617 \fi
```

添加博后摘要

```
3618 \newcommand{\hit@ckeywords@title}{关键词: }
```

```
3619 \def\hit@ckeywords@separator{; }
```

```
3620 \def\hit@ekeywords@separator{,}
```

```
3621 \let\CJK@todaysave=\today
```

```
3622 \def\CJK@todaysmall@short{\the\year 年 \the\month 月}
```

```
3623 \def\CJK@todaysmall{\the\year 年 \the\month 月 \the\day 日}
```

```
3624 \def\CJK@todaybig@short{\zhdigits{\the\year} 年\zhnumber{\the\month} 月}
```

```
3625 \def\CJK@todaybig{\zhdigits{\the\year} 年\zhnumber{\the\month} 月\zhnumber{\the\day} 日}
```

```
3626 \def\CJK@today{\CJK@todaysmall}
```

```
3627 \renewcommand\today{\CJK@today}
```

```
3628 \newcommand\CJKtoday[1][1]{%
```

```
3629 \ifcase#1\def\CJK@today{\CJK@todaysave}
```

```
3630 \or\def\CJK@today{\CJK@todaysmall}
```

```
3631 \or\def\CJK@today{\CJK@todaybig}
```

```
3632 \fi}
```

按照 word 示范要求, 此处使用阿拉伯数字

```
3633 \cdate{\ifhit@bachelor\CJK@todaysmall\else\CJK@todaysmall@short\fi}
```

```
3634 \edate{\ifcase \month \or January\or February\or March\or April\or May%
```

```
3635 \or June\or July \or August\or September\or October\or November
```

```
3636 \or December\fi\unskip,\ \the\year}
```

```
3637 </bookcfg>
```

按照我工要求, 页面中标题之下不少于一行。

```
3638 <*bookcls>
```

```
3639 \def\hit@title@font{%
```

```
3640 \ifhit@arialtitle\sffamily\else\heiti\fi}
```

```
3641 \newcommand\hit@chapter@titleformat[1]{% 开启悬挂缩进选项
```

```
3642 \ifhit@english
```

```
3643 \MakeUppercase{#1}
```

```
3644 \else
```

```
3645 \ifthenelse%
```

```
3646 {\equal{#1}{\eabstractname}}%
```

```
3647 {\bfseries #1}%
```

```
3648 % 实现章标题的居中加悬挂缩进, 注意, 此处一定是\CTEX@chaptername\CTEX@chapter@aftername, 否
则是英文标题长度
```

```
3649 {\ifhit@chapterhang\settowidth{\hangindent}{\CTEX@chaptername\CTEX@chapter@aftername}\hangafter=1\}
```

```
3650 \fi
3651 }
```

添加英文版目录 chapter title 控制

```
3652 \newcommand\hit@chapter@engformat[1]{% 开启悬挂缩进选项
```

```
3653 \begin{center}
```

```
3654 \hit@title@font
```

```
3655 \if@mainmatter
```

```
3656 \xiaoer[1.57481]
```

```
3657 \else
```

```
3658 \sanhao[1.57481]
```

```
3659 \fi\bfseries
```

```
3660 #1
```

```
3661 \end{center}}
```

```
3662 \newcommand\hit@chapter@engnameformat[1]{% 开启悬挂缩进选项
```

```
3663 \begin{center}
```

```
3664 \MakeUppercase{#1}
```

```
3665 \end{center}}
```

```
3666 \newcommand\hit@chapter@postdocformat[1]{\centering\hit@title@font\xiaoer[1.57481]\textbf{#1}}
```

添加博后标题格式

```
3667 \renewcommand\@afterheading{%
```

```
3668 \@nobreaktrue
```

```
3669 \everypar{%
```

```
3670 \if@nobreak
```

```
3671 \@nobreakfalse
```

```
3672 \clubpenalty 1
```

```
3673 \if@afterindent \else
```

```
3674 {\setbox\z@\lastbox}%
```

```
3675 \fi
```

```
3676 \else
```

```
3677 \clubpenalty 1
```

```
3678 \everypar{}}%
```

```
3679 \fi}}
```

设置一到四级标题、目录、书签格式。

```
3680 \ifhit@english
```

```
3681 \ctexset{%
```

```
3682 chapter={
```

```
3683 afterindent=true,
```

```
3684 pagestyle={hit@headings},
```

```
3685 beforeskip={28.34658bp},% 一个空行 1.57481 E 18
```

```
3686 afterskip={24.74658bp},%0.8 应该不计算间距 0.8 E 18 + 0.57481E18
```

```
3687 aftername={\par},
```

```
3688 format={\hit@chapter@engformat},
```

```
3689 nameformat={\hit@chapter@engnameformat},%\center 会影响之后全局
```

```
3690 numberformat=\relax,
```

```
3691 titleformat={\hit@chapter@titleformat},
```

```

3692     fixskip=true, % 添加这一行去除默认间距
3693     %hang=true,
3694 },
3695 section={
3696     afterindent=true,
3697     beforekip={\ifhit@glue 13.5bp \@plus 1.677267bp \@minus 1.157391bp \else 13.5bp \fi},%
    上下空 0.5 行
3698     afterskip={\ifhit@glue 13.5bp \@plus 1.677267bp \@minus 1.157391bp \else 13.5bp \fi},
3699     format={\hit@title@font\ifhit@glue\fontsize{15bp}{21bp \@plus 1.677267bp \@minus 1.157391bp}\else
3700     aftername=\enspace,
3701     fixskip=true,
3702     break={},
3703 },
3704 subsection={
3705     afterindent=true,
3706     beforekip={\ifhit@glue 11bp \@plus 1.842609bp \@minus 0.9920497bp \else 11bp \fi},
3707     afterskip={\ifhit@glue 11bp \@plus 2.33863bp \@minus 0.49602bp \else 11bp \fi},
3708     format={\hit@title@font\ifhit@glue\fontsize{14bp}{18bp \@plus 1.842609bp \@minus 0.9920497bp}\else
3709     aftername=\enspace,
3710     fixskip=true,
3711     break={},
3712 },
3713 subsubsection={
3714     afterindent=true,
3715     beforekip={\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp \else 9bp \fi},
3716     afterskip={\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp \else 9bp \fi},
3717     format={\hit@title@font\normalsize},
3718     aftername=\enspace,
3719     fixskip=true,
3720     break={},
3721 },
3722 paragraph/afterindent=true,
3723 subparagraph/afterindent=true
3724 }
3725 \else
3726 \ifhit@postdoc
3727 \ctexset{%
3728     chapter={
3729         afterindent=true,
3730         pagestyle={hit@headings},
3731         beforekip={28.34658bp},% 一个空行 1.57481 ㊦ 18
3732         afterskip={24.74658bp},%0.8 应该不计算间距 0.8 ㊦ 18 + 0.57481㊦18
3733         aftername=\enspace,
3734         format={\hit@chapter@postdocformat},%\center 会影响之后全局
3735         nameformat=\relax,
3736         numberformat=\relax,

```

```

3737     titleformat=\hit@chapter@titleformat,
3738     fixskip=true, % 添加这一行去除默认间距
3739     %hang=true,
3740 },
3741 section={
3742     afterindent=true,
3743     beforeskip={\ifhit@glue 13.5bp \@plus 1.677267bp \@minus 1.157391bp \else 13.5bp \fi},%
    上下空 0.5 行
3744     afterskip={\ifhit@glue 13.5bp \@plus 1.677267bp \@minus 1.157391bp \else 13.5bp \fi},
3745     format={\hit@title@font\ifhit@glue\fontsize{15bp}{21bp \@plus 1.677267bp \@minus 1.157391bp}\else
3746     aftername=\enspace,
3747     fixskip=true,
3748     break={},
3749 },
3750 subsection={
3751     afterindent=true,
3752     beforeskip={\ifhit@glue 11bp \@plus 1.842609bp \@minus 0.9920497bp \else 11bp \fi},
3753     afterskip={\ifhit@glue 11bp \@plus 2.33863bp \@minus 0.49602bp \else 11bp \fi},
3754     format={\hit@title@font\ifhit@glue\fontsize{14bp}{18bp \@plus 1.842609bp \@minus 0.9920497bp}\else
3755     aftername=\enspace,
3756     fixskip=true,
3757     break={},
3758 },
3759 subsubsection={
3760     afterindent=true,
3761     beforeskip={\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp \else 9bp \fi},
3762     afterskip={\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp \else 9bp \fi},
3763     format={\hit@title@font\normalsize},
3764     aftername=\enspace,
3765     fixskip=true,
3766     break={},
3767 },
3768 paragraph/afterindent=true,
3769 subparagraph/afterindent=true
3770 }
3771
3772 \else
3773 \ctexset{%
3774     chapter={
3775         afterindent=true,
3776         pagestyle={hit@headings},
3777         beforeskip={28.34658bp},% 一个空行 1.57481 @ 18
3778         afterskip={24.74658bp},%0.8 应该不计算间距 0.8 @ 18 + 0.57481@18
3779         aftername=\enspace,
    添加本科生章标题加粗选项
3780         format={\centering\hit@title@font\xiaoer[1.57481]\ifhit@chapterbold\ifhit@bachelor\bfseries\fi\fi}

```


影响之后全局

```

3781     nameformat=\relax,
3782     numberformat=\relax,
3783     titleformat=\hit@chapter@titleformat,
3784     fixskip=true, % 添加这一行去除默认间距
3785     %hang=true,
3786 },
3787 section={
3788     afterindent=true,
3789     beforekip={\ifhit@glue 13.5bp \@plus 1.677267bp \@minus 1.157391bp \else 13.5bp \fi},%

```

上下空 0.5 行

```

3790     afterskip={\ifhit@glue 13.5bp \@plus 1.677267bp \@minus 1.157391bp \else 13.5bp \fi},
3791     format={\hit@title@font\ifhit@glue\fontsize{15bp}{21bp \@plus 1.677267bp \@minus 1.157391bp}\else
3792     aftername=\enspace,
3793     fixskip=true,
3794     break={},
3795 },
3796 subsection={
3797     afterindent=true,
3798     beforekip={\ifhit@glue 11bp \@plus 1.842609bp \@minus 0.9920497bp \else 11bp \fi},
3799     afterskip={\ifhit@glue 11bp \@plus 2.33863bp \@minus 0.49602bp \else 11bp \fi},
3800     format={\hit@title@font\ifhit@glue\fontsize{14bp}{18bp \@plus 1.842609bp \@minus 0.9920497bp}\else
3801     aftername=\enspace,
3802     fixskip=true,
3803     break={},
3804 },
3805 subsubsection={
3806     afterindent=true,
3807     beforekip={\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp \else 9bp \fi},
3808     afterskip={\ifhit@glue 8.50398bp \@plus 2.83465bp \@minus 0bp \else 9bp \fi},
3809     format={\hit@title@font\normalsize},
3810     aftername=\enspace,
3811     fixskip=true,
3812     break={},
3813 },
3814 paragraph/afterindent=true,
3815 subparagraph/afterindent=true
3816 }
3817 \fi
3818 \fi

```

此处添加英文版和博后的 title 设置 设置附表、附录格式。

```

3819 \ifhit@english
3820 \NewDocumentCommand{\hit@appendix@chapter}{s o m o}{%
3821   \IfBooleanT{#1}%
3822   {
3823     \phantomsection

```

```

3824 \IfValueTF{#2}{
3825     \markboth{#2}{#2}
3826 }{
3827     \markboth{#3}{#3}
3828 }
3829
3830 \ifthenelse%
3831 {\equal{#3}{\cabstracname}}%
3832 {\relax}
3833 {\addcontentsline{toc}{chapter}{\texorpdfstring{\ifhit@arialtitle\sffamily\heiti\else\heiti\fi #3}}
3834
3835 \IfValueT{#4}{\addcontentsline{toe}{chapter}{\texorpdfstring{\bfseries #4}{#4}}}
3836 \hit@chapter*{#3}
3837 }
3838 }
3839 \else

```

添加英文版附表格式

```

3840 \NewDocumentCommand{\hit@appendix@chapter}{s o m o}{%
3841 \IfBooleanT{#1}%
3842 {
3843     \phantomsection
3844     \IfValueTF{#2}{
3845         \markboth{#2}{#2}
3846     }{
3847         \markboth{#3}{#3}
3848     }
3849     \ifthenelse%
3850     {\equal{#3}{\eabstractname}}%
3851     {\addcontentsline{toc}{chapter}{\texorpdfstring{\ifhit@arialtitle\sffamily\heiti\else\heiti\fi \i
3852     {\addcontentsline{toc}{chapter}{\texorpdfstring{\ifhit@arialtitle\sffamily\heiti\else\heiti\fi #3}}
3853     \IfValueT{#4}{\addcontentsline{toe}{chapter}{\texorpdfstring{\bfseries #4}{#4}}}
3854     \hit@chapter*{#3}
3855     }
3856 }
3857 \fi
3858 \newcommand{\BiAppChapter}[2] % 该附录命令适用于有章节的完整附录
3859 {\phantomsection
3860 \chapter{#1}

```

此处添加保护选项

```

3861 \addcontentsline{toe}{chapter}{\texorpdfstring{\bfseries \xiaosi Appendix \thechapter~~#2}{Appendix \thechapter}}
3862 }

```

设置章节命令。s: 星号, 表示在目录中不出现序号。m: 必须要有的选项, 中文章节名称也即目录中名称, 页眉中名称, 书签中的名称。o: 可选内容, 没有就默认是正文章节, 如果有, 则是英文目录中显示的内容。

```

\chapter
\section 3863 \let\hit@chapter\chapter
\subsection 3864 \RenewDocumentCommand{\chapter}{s o m o}{%
\subsubsection 3865 \ifhit@openright\cleardoublepage\else\clearpage\fi\phantomsection%
3866 \IfBooleanTF{#1}%
3867 {% if \chapter*
3868 \IfNoValueTF{#2}%
3869 {\hit@chapter*{#3}}%
3870 {\hit@chapter*[#2]{#3}}%
3871 \IfValueT{#4}{%

此处添加保护选项

3872 \addcontentsline{toe}{chapter}{\texorpdfstring{\bfseries #4}{#4}}
3873 }
3874 }%
3875 {% if \chapter
3876 \IfNoValueTF{#2}%
3877 {\hit@chapter{#3}}%
3878 {\hit@chapter[#2]{#3}}%
3879 \IfValueT{#4}{%

此处需删除章节的空白 此处添加保护选项

3880 \addcontentsline{toe}{chapter}{\texorpdfstring{\bfseries\relax Chapter \thechapter\hspace{0.5em}}{i
3881 }
3882 }
3883 }
3884
3885 \let\hit@section\section
3886 \RenewDocumentCommand\section{s o m o}{
3887 \IfBooleanTF{#1}%
3888 {% if \section*
3889 \IfNoValueTF{#2}%
3890 {\hit@section*{#3}}%
3891 {\hit@section*[#2]{#3}}%
3892 \IfValueT{#4}{%
3893 \addcontentsline{toe}{section}{#4}
3894 }
3895 }%
3896 {% if \section
3897 \IfNoValueTF{#2}%
3898 {\hit@section{#3}}%
3899 {\hit@section[#2]{#3}}%
3900 \IfValueT{#4}{%

此处需删除章节的空白

3901 \addcontentsline{toe}{section}{\protect\numberline{\csname thesection\endcsname}\ignorespaces #4}
3902 }

```

```

3903 }
3904 }
3905
3906 \let\hit@subsection\subsection
3907 \RenewDocumentCommand\subsection{s o m o}{
3908   \IfBooleanTF{#1}%
3909   {% if \subsection*
3910     \IfNoValueTF{#2}%
3911     {\hit@subsection*{#3}}%
3912     {\hit@subsection*[#2]{#3}}%
3913     \IfValueT{#4}{%
3914       \addcontentsline{toe}{subsection}{#4}
3915     }
3916   }%
3917   {% if \subsection
3918     \IfNoValueTF{#2}%
3919     {\hit@subsection{#3}}%
3920     {\hit@subsection[#2]{#3}}%
3921     \IfValueT{#4}{%

```

此处需删除章节的空白

```

3922   \addcontentsline{toe}{subsection}{\protect\numberline{\csname thesubsection\endcsname}\ignorespaces}
3923   }
3924 }
3925 }
3926
3927 \let\hit@subsubsection\subsubsection
3928 \RenewDocumentCommand\subsubsection{s o m o}{
3929   \IfBooleanTF{#1}%
3930   {% if \subsubsection*
3931     \IfNoValueTF{#2}%
3932     {\hit@subsubsection*{#3}}%
3933     {\hit@subsubsection*[#2]{#3}}%
3934     \IfValueT{#4}{%
3935       \addcontentsline{toe}{subsubsection}{#4}
3936     }
3937   }%
3938   {% if \subsubsection
3939     \IfNoValueTF{#2}%
3940     {\hit@subsubsection{#3}}%
3941     {\hit@subsubsection[#2]{#3}}%
3942     \IfValueT{#4}{%

```

此处需删除章节的空白

```

3943   \addcontentsline{toe}{subsubsection}{\protect\numberline{\csname thesubsubsection\endcsname}\ignorespaces}
3944   }
3945 }

```

3946 }

4.5.9 定义封面

封面信息。

```

3947 \def\hit@def@term#1{%
3948   \define@key{hit}{#1}{\csname #1\endcsname{##1}}
3949   \expandafter\gdef\csname #1\endcsname##1{%
3950     \expandafter\gdef\csname hit@#1\endcsname{##1}}
3951   \csname #1\endcsname{}}
3952
3953 \hit@def@term{statesecrets} % 密级
3954 \hit@def@term{natclassifiedindex} % 国内图书分类号
3955 \hit@def@term{intclassifiedindex} % 国际图书分类号
3956
3957 \hit@def@term{ctitlecover} % 中文标题封面
3958 \hit@def@term{ctitle} % 中文标题
3959 \hit@def@term{csubtitle} % 中文副标题
3960 \hit@def@term{cxueke} % 中文学科
3961 \hit@def@term{cauthor} % 中文作者
3962 \hit@def@term{csupervisor} % 中文导师
3963 \hit@def@term{cassosupervisor} % 中文副导师
3964 \hit@def@term{ccosupervisor}% 中文联合导师
3965 \hit@def@term{caffil}% 中文院系
3966 \hit@def@term{csubject}% 中文专业
3967 \hit@def@term{cdate}
3968 \hit@def@term{cnumber}
3969 \hit@def@term{cpositionname}
3970 \hit@def@term{cstartdate}
3971 \hit@def@term{cenddate}

```

添加博后封皮的 title 选项

```

3972
3973 \hit@def@term{cstudentid}%
3974 \hit@def@term{cstudenttype}%
3975 \hit@def@term{ctitleone}%
3976 \hit@def@term{ctitletwo}%
3977
3978
3979 \hit@def@term{etitle} % 英文标题
3980 \hit@def@term{esubtitle} % 英文标题
3981 \hit@def@term{exueke} % 英文学科
3982 \hit@def@term{eauthor} % 英文作者
3983 \hit@def@term{esupervisor} % 英文导师
3984 \hit@def@term{eassosupervisor} % 英文副导师
3985 \hit@def@term{ecosupervisor} % 英文联合导师
3986 \hit@def@term{eaffil}

```

```

3987 \hit@def@term{esubject}
3988 \hit@def@term{edate}
3989 \hit@def@term{estudenttype}
3990 \newcommand{\hit@cabstract}[1]{\long\gdef\hit@cabstract{#1}}
3991 \newenvironment{cabstract}{\Collect@Body\hit@cabstract}{}
3992 \newcommand{\hit@eabstract}[1]{\long\gdef\hit@eabstract{#1}}
3993 \newenvironment{eabstract}{\Collect@Body\hit@eabstract}{}
3994 \def\hit@parse@keywords#1{
3995   \define@key{hit}{#1}{\csname #1\endcsname{##1}}
3996   \expandafter\gdef\csname hit@#1\endcsname{}
3997   \expandafter\gdef\csname #1\endcsname##1{
3998     \@for\reserved@a:=##1\do{
3999       \expandafter\ifx\csname hit@#1\endcsname\@empty\else
4000         \expandafter\g@addto@macro\csname hit@#1\endcsname{%
4001           \ignorespaces\csname hit@#1@separator\endcsname}
4002       \fi
4003       \expandafter\expandafter\expandafter\g@addto@macro%
4004         \expandafter\csname hit@#1\expandafter\endcsname\expandafter{\reserved@a}}}}
4005 \hit@parse@keywords{ckeywords}
4006 \hit@parse@keywords{ekeywords}
4007 \def\hitsetup{\kvsetkeys{hit}}
4008 </bookcls>

```

定义封面中用到的词汇。

```

4009 <*bookcfg>
4010 \ifhit@postdoc
4011 \gdef\hit@cxuweishort{博}
4012 \gdef\hit@exuewei{Doctor}
4013 \gdef\hit@exuweier{Doctoral}
4014 \gdef\hit@cxuewei{\hit@cxuweishort 士}
4015 \gdef\hit@cdegree{\hit@cxueke\hit@cxuewei}
4016 \gdef\hit@edegree{\hit@exuewei \ of \hit@exueke}
4017 \def\hit@cauthortitle{\hit@cxuweishort 士研究生}
4018 \fi
4019

```

添加博后选项

```

4020
4021 \ifhit@doctor
4022 \gdef\hit@cxuweishort{博}
4023 \gdef\hit@exuewei{Doctor}
4024 \gdef\hit@exuweier{Doctoral}
4025 \gdef\hit@cxuewei{\hit@cxuweishort 士}
4026 \gdef\hit@cdegree{\hit@cxueke\hit@cxuewei}
4027 \gdef\hit@edegree{\hit@exuewei \ of \hit@exueke}
4028 \def\hit@cauthortitle{\hit@cxuweishort 士研究生}
4029 \fi

```

```

4030 \ifhit@master
4031 \gdef\hit@cxueweishort{硕}
4032 \gdef\hit@exuewei{Master}
4033 \gdef\hit@exueweier{Master's}
4034 \gdef\hit@cxuewei{\hit@cxueweishort 士}
4035 \gdef\hit@cdegree{\hit@cxueke\hit@cxuewei}
4036 \gdef\hit@edegree{\hit@exuewei \ of \hit@exueke}
4037 \def\hit@cathortitle{\hit@cxueweishort 士研究生}
4038 \fi
4039 \ifhit@bachelor
4040 \gdef\hit@cxuewei{学士}
4041 \fi
4042
4043
4044 \def\hit@postdoc@classifiedindex{分类号}
4045 \def\hit@postdoc@secretlevel{密级}
4046 \def\hit@postdoc@UDC{U\hspace{0.4\ccwd}D\hspace{0.4\ccwd}C}
4047 \def\hit@stage@opening{开题}
4048 \def\hit@stage@midterm{中期}
4049 \def\hit@stage@doctype{报告}
4050
4051
4052 \def\hit@postdoc@number{编号}
4053 \def\hit@postdoc@documenttitle{博\hspace{0.5\ccwd} 士\hspace{0.5\ccwd} 后\hspace{0.5\ccwd} 研\hspace{0.5\ccwd} 究\hspace{0.5\ccwd} 工\hspace{0.5\ccwd} 作\hspace{0.5\ccwd} 报\hspace{0.5\ccwd} 告}
4054 \def\hit@postdoc@documenttitlenospace{博士后研究工作报告}
4055 \def\hit@postdoc@finishdate{工作完成日期}
4056 \def\hit@postdoc@submitdate{报告提交日期}
4057
4058 \def\hit@postdoc@authorname{博\hspace{0.5\ccwd} 士\hspace{0.5\ccwd} 后\hspace{0.5\ccwd} 姓\hspace{0.5\ccwd} 名}
4059 \def\hit@postdoc@supervisor{合\hspace{\ccwd} 作\hspace{\ccwd} 导\hspace{\ccwd} 师}
4060 \def\hit@postdoc@positionname{流\hspace{0.5\ccwd} 动\hspace{0.5\ccwd} 站\hspace{0.5\ccwd} 名\hspace{0.5\ccwd} 称}
4061 \def\hit@postdoc@major{专\hspace{\ccwd} 业\hspace{\ccwd} 名\hspace{\ccwd} 称}
4062 \def\hit@postdoc@startdate{研究工作起始时间}
4063 \def\hit@postdoc@enddate{研究工作期满时间}
4064 \def\hit@postdoc@separator{: }
4065
添加博后选项

4066
4067
4068 \def\hit@bachelor@cxuewei{本科}
4069 \def\hit@bachelor@cthesisname{毕业设计（论文）}
4070
4071

```

4072

4073 \def\hit@bachelor@cmajortitle{专\hspace{2\ccwd} 业}

4074 \def\hit@bachelor@cstudenttitle{学\hspace{2\ccwd} 生}

4075 \def\hit@bachelor@cstudentidtitle{学\hspace{2\ccwd} 号}

4076 \def\hit@bachelor@cclass{班\hspace{2\ccwd} 号}

4077

添加本科开题封皮中 title 定义

4078

4079

4080

4081 \def\hit@bachelor@caffilttitle{院（系）}

4082 </bookcfg>

此处添加深圳校区设置

4083 <*bookcfg>

4084 \def\hit@bachelor@caffilttitlesz{学院}

4085 \def\hit@bachelor@caffilttitlewh{学院}

4086 \def\hit@bachelor@cstudentidtitle{学号}

4087 \def\hit@bachelor@cmajortitle{专业}

4088 \def\hit@bachelor@csupervisortitle{指导教师}

4089 \def\hit@bachelor@cthesisitle{题目}

4090 \def\hit@bachelor@cstudenttitle{学生}

4091 \def\hit@cthesisname{学位论文}

4092

4093

4094 \def\hit@bachelor@cdatetitle{日\hspace{2\ccwd} 期}

4095

4096 \newcommand{\hit@bachelor@teachercomment}{指导教师评语：}

4097 \newcommand{\hit@bachelor@teachersign}{指导教师签字：}

4098 \newcommand{\hit@bachelor@checkdate}{检查日期：}

4099

4100

4101 \def\hit@cthesisitleprefix{题\hspace{\ccwd} 目}

4102

4103

4104 \def\hit@graduate@caffilttitle{院\hspace{3\ccwd}（系）}

4105 \def\hit@graduate@cmajortitle{学\hspace{4\ccwd} 科}

4106 \def\hit@graduate@supervisor{导\hspace{4\ccwd} 师}

4107 \def\hit@graduate@studenttitle{研\hspace{1.5\ccwd} 究\hspace{1.5\ccwd} 生}

4108 \def\hit@graduate@studentid{学\hspace{4\ccwd} 号}

4109

4110

4111 \def\hit@graduate@datetitle{\ifhit@opening\hit@stage@opening

4112 \else\ifhit@midterm\hit@stage@midterm\fi\fi\hit@stage@doctype 日期}

4113 \def\hit@graduate@enrolldate{入\hspace{0.666666\ccwd} 学\hspace{0.666666\ccwd} 时\hspace{0.666666\ccwd} 间}


```
4114 \def\hit@graduate@thesistitle{论\hspace{0.666666\ccwd} 文\hspace{0.666666\ccwd} 题\hspace{0.666666\ccwd} 目}
```

```
4115 \def\hit@graduate@cafflimajor{学\hspace{0.666666\ccwd} 科\hspace{0.666666\ccwd} 专\hspace{0.666666\ccwd} 业}
```

```
4116
```

```
4117
```

```
4118 \def\hit@cschoolname{哈尔滨工业大学}
```

```
4119 </bookcfg>
```

此处添加深圳校区设置

```
4120 <*bookcfg>
```

```
4121 \def\hit@shenzhencampus{(深圳)}
```

```
4122 \def\hit@weihaicampus{(威海)}
```

```
4123 \def\hit@harbincampus{(哈尔滨)}
```

添加哈尔滨校区选项

```
4124
```

```
4125 \def\hit@cschoolnametitle{授予学位单位}
```

```
4126 \def\hit@cdate{答辩日期}
```

```
4127 \def\hit@caffilttitle{所在单位}
```

```
4128 \def\hit@csubjecttitle{学科}
```

```
4129 \def\hit@cdegreetitle{申请学位}
```

```
4130 \def\hit@csupervisortitle{导师}
```

```
4131 \def\hit@cassosupervisortitle{副导师}
```

```
4132 \def\hit@ccosupervisortitle{联合导师}
```

```
4133 \def\hit@title@csep{: }
```

```
4134 \def\hit@eauthortitle{Candidate}
```

```
4135 \def\hit@esupervisortitle{Supervisor}
```

```
4136 \def\hit@eassosupervisortitle{Associate Supervisor}
```

```
4137 \def\hit@ecosupervisortitle{Co Supervisor}
```

```
4138 \def\hit@edegreetitle{Academic Degree Applied for}
```

```
4139 \def\hit@esubjecttitle{Specialty}
```

```
4140 \def\hit@eaffilttitle{Affiliation}
```

```
4141 \def\hit@edatetitle{Date of Defence}
```

```
4142 \def\hit@eschoolnametitle{Degree-Conferring-Institution}
```

```
4143 \def\hit@eschoolname{Harbin Institute of Technology}
```

```
4144 \def\hit@title@esep{:}
```

```
4145 \def\hit@natclassifiedindextitle{国内图书分类号}
```

```
4146 \def\hit@internatclassifiedindextitle{国际图书分类号}
```

```
4147 \def\hit@secretlevel{密级}
```

```
4148 \def\hit@schoolidtitle{学校代码}
```

```
4149 \def\hit@schoolid{10213}
```

```
4150
```

```
4151 \ifhit@postdoc
```

```
4152 \def\hit@conclusion@ctitle{结论}
```

```
4153 \else
```

```
4154 \def\hit@conclusion@ctitle{结\hspace{\ccwd} 论}
```

```

4155 \fi
4156
4157 \def\hit@conclusion@etitle{Conclusions}
4158 \def\hit@bibname@etitle{References}
4159
4160 \ifhit@postdoc
4161 \def\hit@acknowledgement@ctitle{致谢}
4162 \else
4163 \def\hit@acknowledgement@ctitle{致\hspace{\ccwd} 谢}
4164 \fi
4165
4166 \def\hit@acknowledgement@etitle{Acknowledgements}
4167 \ifhit@postdoc
4168 \def\hit@resume@ctitle{博士后个人简历}
4169 \else
4170 \def\hit@resume@ctitle{个人简历}
4171 \fi

```

添加博后封皮 title 的选项

```

4172
4173
4174 \def\hit@correspondingaddr@ctitle{永久通讯地址}
4175
4176
4177 \def\hit@resume@etitle{Resume}
4178 \def\hit@authorization@ctitle{哈尔滨工业大学学位论文原创性声明和使用权限}
4179 \def\hit@authorization@etitle{Statement of copyright and Letter of authorization}
4180
4181
4182
4183 \newcommand{\hit@authorsig}{作者签名: }
4184 \newcommand{\hit@teachersig}{导师签名: }
4185 \newcommand{\hit@frontdate}{日期: }
4186 \newcommand{\hit@denotation@ctitle}{物理量名称及符号表}
4187 \newcommand{\hit@denotation@etitle}{List of physical quantity and symbol}
4188 \newcommand{\hit@authorizationtitle}{学位论文使用权限}
4189
4190 \newcommand{\hit@shenzhen@schoolbottommark}{
4191   \begin{center}
4192     \songti\sanhao\textbf{哈工大（深圳）制}
4193   \end{center}
4194   \begin{center}
4195     \songti\sanhao\textbf{二〇一二年三月}
4196   \end{center}
4197 }
4198 \newcommand{\hit@harbin@schoolbottommark}{
4199   \begin{center}

```

```

4200 \songti\sanhao\textbf{研究生院制}
4201 \end{center}
4202 \begin{center}
4203 \songti\sanhao\textbf{二〇一四年九月}
4204 \end{center}
4205 }
4206
4207 \newcommand{\hit@harbin@bachelor@schoolbottommark}{
4208 \begin{center}
4209 \lishu\xiaoer\textbf{哈尔滨工业大学教务处制}
4210 \end{center}
4211 }
4212
4213
4214 \newcommand{\hit@shenzhen@doctor@midterm@note}{
4215 \thispagestyle{empty}
4216 {\begin{center}
4217 \songti\sanhao\textbf{说\hspace{4\ccwd} 明}
4218 \end{center}
4219 }
4220 \vspace{1cm}\songti\sihao[2]
4221 \begin{enumerate}[itemsep=-4bp]
4222 \item 博士研究生学位论文中期报告一般在入学后的第五学期末完成。
4223 \item 此报告由学生本人填写，请导师签字后提交一份给检查小组。答辩结束后由检查组长签署意见。
4224 \item 报告经中期报告检查组长签字同意后，由学科部保存，以备论文答辩时参考。研究生院学生培养处将对研究生的学位论文中期报告进行抽查。
4225 \item 报告统一用 A4 纸打印。
4226 \end{enumerate}
4227 }
4228
添加深圳中期报告内容
4229
4230
4231
4232 \newcommand{\hit@authorizationtext}{%
4233 学位论文是研究生在哈尔滨工业大学攻读学位期间完成的成果，知识产权归属哈尔滨工业大学。学位论文的使用权限如下：
4234
4235 (1) 学校可以采用影印、缩印或其他复制手段保存研究生上交的学位论文，并向国家图书馆报送学位论文；(2) 学校可以将学位论文部分或全部内容编入有关数据库进行检索和提供相应阅览服务；(3) 研究生毕业后发表与此学位论文研究成果相关的学术论文和其他成果时，应征得导师同意，且第一署名单位为哈尔滨工业大学。
4236
4237 保密论文在保密期内遵守有关保密规定，解密后适用于此使用权限规定。
4238
4239 本人知悉学位论文的使用权限，并将遵守有关规定。}
4240 \newcommand{\hit@declarename@bachelor}{哈尔滨工业大学本科毕业设计（论文）原创性声明}

```

4241 \newcommand{\hit@authorizationtext@bachelor}{%
 4242 本人郑重声明：在哈尔滨工业大学攻读学士学位期间，所提交的毕业设计（论文）《\hit@ctitle》，是本人在
 导师指导下独立进行研究工作所取得的成果。对本文的研究工作做出重要贡献的个人和集体，均已在文中以
 明确方式注明，其它未注明部分不包含他人已发表或撰写过的研究成果，不存在购买、由他人代写、剽窃和伪
 造数据等作假行为。

4243

4244 本人愿为此声明承担法律责任。}

4245 \newcommand{\hit@declarename}{学位论文原创性声明}

4246 \newcommand{\hit@declaretext}{%}

4247 本人郑重声明：此处所提交的学位论文《\hit@ctitle》，是本人在导师指导下，在哈尔滨工业大学攻读学位
 期间独立进行研究工作所取得的成果，且学位论文中除已标注引用文献的部分外不包含他人完成或已发表的
 研究成果。对本学位论文的研究工作做出重要贡献的个人和集体，均已在文中以明确方式注明。}

4248

4249

4250 \ifhit@english

4251 \newcommand{\hit@publication@ctitle}{Author's Publications}

4252 \else

4253 \ifhit@postdoc

4254 \newcommand{\hit@publication@ctitle}{博士后期间的研究成果}

4255 \else

4256 \newcommand{\hit@publication@ctitle}{攻读\hit@cxuewei 学位期间发表的论文及其他成果}

4257 \fi

4258 \fi

4259 \newcommand{\hit@doctorpublication@ctitle}{博士生期间的研究成果}

博后和英文版附录 title

4260

4261

4262 \newcommand{\hit@datefill}{\hspace{2.5em} 年\hspace{1.5em} 月\hspace{1.5em} 日}

4263 \newcommand{\hit@publication@etitle}{Papers published in the period of Ph.D. education}

4264 \def\hit@index@etitle{Index}

4265 \def\hit@hi{嗨! thesis}

4266 \def\hit@cbraceleft{ (}

4267 \def\hit@cbraceright{) }

4268 \def\hit@ebraceleft{(}

4269 \def\hit@ebraceright{) }

4270 </bookcfg>

中英文封面。

4271 <*bookcls>

4272 \newlength{\hit@title@width}

4273 \newcommand{\hit@put@title}[2][\hit@title@width]{%

4274 \begin{CJKfilltwosides}[b]{#1}#2\end{CJKfilltwosides}}

4275

4276 \def\hit@first@titlepage{%

4277 \ifhit@postdoc\hit@first@titlepage@postdoc\else\ifhit@bachelor\hit@first@titlepage@bachelor\else\hit@

4278

125

```

4325     \hit@weihaicampus
4326     \fi
4327     \ifhit@shenzhen
4328     \hit@shenzhencampus
4329     \fi
4330 \end{center}
4331 \begin{center}
4332     \hit@cdate
4333 \end{center}}
4334 }
4335
4336
4337
4338 \newcommand{\hit@second@titlepage@postdoc}{
4339     \ifthenelse%
4340     {\equal{\hit@fontset}{siyuan}}%
4341     {\xiaosi[1]\vspace*{0.65em}}%
4342     {\xiaosi[1]\textcolor{rgb}{1,1,1}{\songti{\hit@hi}}}%
4343     \vspace*{1.2cm}
4344     \begin{center}
4345         \parbox[t][8cm][t]{\textwidth}{
4346             \begin{center}\songti\sanhao[2]\hit@ctitlecover\end{center}
4347             \vspace*{16bp}
4348             \begin{center}\sihao[2]\MakeUppercase{\hit@etitle}\end{center}
4349         }
4350         \parbox[t][5cm][t]{\textwidth}{
4351             \begin{center}\songti\sihao[2]
4352                 \begin{tabularx}{0.6\linewidth}{l@{\hit@postdoc@separator}l}
4353                     \hit@postdoc@authorname & \hit@cauthor \\
4354                     \hit@postdoc@supervisor & \hit@csupervisor \\
4355                     \hit@postdoc@positionname & \hit@cpositionname \\
4356                     \hit@postdoc@major & \hit@csubject \\
4357                 \end{tabularx}
4358                 \begin{tabularx}{0.6\linewidth}{l@{\hit@postdoc@separator}l}
4359                     \hit@postdoc@startdate & \hit@cstartdate \\
4360                     \hit@postdoc@enddate & \hit@cenddate \\
4361                 \end{tabularx}
4362             \end{center}
4363         }
4364     \end{center}
4365     \vfill
4366     {\songti\sihao[2]
4367         \begin{center}
4368             \hit@cschoolname%
4369             \ifhit@harbin
4370             \hit@harbincampus

```

```

4371      \fi
4372      \ifhit@weihai
4373      \hit@weihaicampus
4374      \fi
4375      \ifhit@shenzhen
4376      \hit@shenzhencampus
4377      \fi
4378      \end{center}
4379      \begin{center}
4380      \hit@cdate
4381      \end{center}}}}
4382

```

添加博后封皮

```

4383
4384
4385
4386
4387 \newcommand{\hit@first@titlepage@bachelor}{
4388 \ifthenelse%
4389 {\equal{\hit@fontset}{siyuan}}%
4390 {\xiaosi[1]\vspace*{0.65em}}%
4391 {\xiaosi[1]\textcolor{rgb}{1,1,1}{\songti{\hit@hi}}}%
4392 \vspace*{1.2cm}
4393 \begin{center}
4394 \parbox[t][3.4cm][t]{\textwidth}{
4395 \begin{center}\erhao[0]\heiti\hit@ctitlecover\end{center} }
4396 \parbox[t][9cm][t]{\textwidth}{
4397 \begin{center}\xiaoer[0]\songti\textbf{\hit@cauthor}\end{center}
4398 }
4399 \begin{center}
4400 \setlength{\hit@title@width}{4em}
4401 \heiti\xiaosi

```

此处深圳校区竟然是左对齐。另外，院系名称也有点不一样。

```

4402 \ifhit@shenzhen%
4403 \begin{tabular}{rl}%
4404 \else%
4405 \begin{tabular}{rc}%
4406 \fi%
4407 {\hit@put@title{%
4408 \ifhit@harbin%
4409 \hit@bachelor@caffiltitle%
4410 \else%
4411 \ifhit@shenzhen%
4412 \hit@bachelor@caffiltitlesz%

```

此处删除威海本科封皮中威海校区字样

```

4413         % \else%
4414         % \ifhit@weihai%
4415         % \hit@bachelor@caffiltitlewh%
4416         % \fi%
4417         \fi%
4418         \fi%
4419         }\hit@title@csep} & \hit@caffil\[\[14pt]
4420 {\hit@put@title{\hit@bachelor@cstudentidtitle}\hit@title@csep} & \hit@cstudentid
4421 \end{tabular}
4422 \ifhit@shenzhen%
4423 \begin{tabular}{rl}%
4424 \else%
4425 \begin{tabular}{rc}%
4426 \fi%
4427 {\hit@put@title{\hit@bachelor@cmajortitle}\hit@title@csep} & \hit@csubject\[\[14pt]
4428 {\hit@put@title{\hit@bachelor@csupervisortitle}\hit@title@csep} & \hit@csupervisor
4429 \end{tabular}
4430 \end{center}
4431 \vspace{2.6cm}
4432 {\xiaosi[0]\songti\textbf{\hit@cdate}}
4433 \end{center}
4434 }

```

此处本科生使用了哈尔滨工业大学的 logo 且本科生论文标题使用了华文新魏字体，为了方便使用，此处使用了矢量化图片作为输入。

```

4435
4436
4437 \newlength{\hit@ctitleonlength}%
4438 \newlength{\hit@ctitletwolength}%
4439 \newcommand{\hit@second@titlepage@bachelor}{
4440 \vspace*{0.8cm}
4441 \ifhit@harbin%
4442 \centering{\includegraphics[width=6.2cm]{hitlogo}}
4443 \else%
4444 \ifhit@shenzhen%
4445 \centering{\includegraphics[width=6.2cm]{hitlogo}~~\raisebox{0.2em}{\kaishu\yihao\hit@shenzhencampus}}
4446 \else%
4447 \ifhit@weihai%
4448 % \centering{\includegraphics[width=6.2cm]{hitlogo}~~\raisebox{0.2em}{\kaishu\yihao\hit@weihaicampus}}

```

删除威海字样

```

4449 \centering{\includegraphics[width=6.2cm]{hitlogo}}
4450 \fi%
4451 \fi%
4452 \fi%
4453 \vspace{1.3cm}
4454 \begin{center}

```



```

4455 \centering\includegraphics[width=10.5cm]{bthesisitle}
4456 \vfill
4457 \parbox[t][14.2cm][b]{\textwidth}
4458 {\heiti\xiaosan
4459 \begin{center} \renewcommand{\arraystretch}{2.5} \heiti
4460 \setlength{\hit@title@width}{5.5em}
4461 \begin{tabular}{l@{\ \ \ }c}

4462 {\xiaor \hit@put@title{\hit@bachelor@cthesisitle}} & \underline{\makebox[6.1cm]{%
4463 \settowidth{\hit@ctitleonlength}{\xiaor \hit@ctitleone}%
4464 \ifdim\hit@ctitleonlength>6.1cm\sanhao\else\xiaor\fi\hit@ctitleone}}\
4465 & \underline{\makebox[6.1cm]{%
4466 \settowidth{\hit@ctitletwolength}{\xiaor \hit@ctitletwo}%
4467 \ifdim\hit@ctitletwolength>6.1cm\sanhao\else\xiaor\fi\hit@ctitletwo}}\
4468 & \
4469 {\hit@put@title{\hit@bachelor@cmajortitle}} & \underline{\makebox[6.1cm]{\hit@csubj
4470 {\hit@put@title{\hit@bachelor@cstudentidtitle}} & \underline{\makebox[6.1cm]{\hit@cs
4471 {\hit@put@title{\hit@bachelor@cstudenttitle}} & \underline{\makebox[6.1cm]{\hit@caut
4472 {\hit@put@title{\hit@bachelor@csupervisortitle}} & \underline{\makebox[6.1cm]{\hit@csupervisor}}\
4473 {\hit@put@title{\hit@cdateitle}} & \underline{\makebox[6.1cm]{\hit@cdate}}
4474 \end{tabular} \renewcommand{\arraystretch}{1}
4475 \end{center}
4476 }
4477 \end{center}
4478 }
4479
4480 \newlength{\hit@etitlelength}%
4481 \newcommand{\hit@first@titlepage@other}{
4482 % 封面一
4483 \ifthenelse%
4484 {\equal{\hit@fontset}{siyuan}}%
4485 {\xiaosi[1]\vspace*{0.65em}}%
4486 {\xiaosi[1]\textcolor{rgb}{1,1,1}{\songti{\hit@hi}}}%
4487 \vspace*{1.2cm}
4488 \begin{center}
4489 \begin{center}\xiaoyi[1]\songti\textbf{\hit@cxuwei\hit@cthesisname}\end{center}
4490 \ifhit@fulltime\vspace{1.4cm}\else%
4491 \begin{center}\xiaoyi[1]\songti\textbf{\hit@cbraceleft\hit@cstudenttype\hit@cbraceright}\end{center}
4492 \fi%
4493 \parbox[t][7.8cm][t]{\textwidth}{%
4494 \begin{center}\erhao\heiti\hit@ctitlecover\end{center}
4495 \ifhit@subtitle\begin{center}\hspace{-4em}\xiaor\heiti\pozhehao\hit@csubtitle\end{center}\fi
4496 \begin{center}%
4497 \settowidth{\hit@etitlelength}{\erhao\hit@etitle\ifhit@subtitle\hit@title@esep\hit@esubtitle\fi}%
4498 \ifdim\hit@etitlelength>450mm\xiaor\else\erhao\fi%
4499 \textbf{\MakeUppercase{\hit@etitle}}%

```

```

4500 \ifhit@subtitle\hit@title@esep\MakeUppercase{\hit@subtitle}\fi}\end{center}}
4501
4502   \parbox[t][7.4cm][t]{\textwidth}{
4503     \begin{center}\xiaoer\songti\textbf{\hit@cauthor}\end{center}}
4504     \parbox[t][1.4cm][t]{\textwidth}{
4505       \begin{center}\kaishu\xiaoer\textbf{\hit@cschoolname}\end{center}}
4506       {\songti\xiaoer\textbf{\hit@cdate}}
4507 \end{center}
4508 }
4509
4510 % 内封
4511 \newcommand{\hit@second@titlepage@other}{
4512   \begin{center}
4513     {\songti \xiaosi
4514       \begin{tabular}{@{}r@{: }l@{}}
4515 \hit@natclassifiedindextitle & \hit@natclassifiedindex\\
4516 \hit@internatclassifiedindextitle & \hit@intclassifiedindex
4517   \end{tabular}}\hfill
4518     {\songti \xiaosi
4519       \begin{tabular}{@{}r@{: }l@{}}
4520 \hit@schoolidtitle & \hit@schoolid\\
4521 \hit@secretlevel & \hit@statesecrets
4522   \end{tabular}}
4523   \parbox[t][3.2cm][t]{\textwidth}{\begin{center} \end{center} }
4524   \parbox[t][2.4cm][t]{\textwidth}{\xiaoer[1]
4525     \begin{center}\songti\bfseries\hit@cdegree\hit@cthesisname\end{center}
4526     \ifhit@fulltime\relax\else\begin{center}\songti\textbf{\hit@cbraceleft\hit@cstudenttype\hit@cbrace}
4527 \parbox[t][5cm][t]{\textwidth}{\erhao
4528   \begin{center}\heiti\hit@ctitlecover\end{center}
4529 \ifhit@subtitle\begin{center}\hspace{-4em}\xiaoer\heiti\pozhehao\hit@csubtitle\end{center}\fi}
4530   \parbox[t][9.8cm][b]{\textwidth}
4531   {\sihao
4532     \setlength{\hit@title@width}{6em}
4533     \begin{center} \renewcommand{\arraystretch}{1.62} \songti
4534 \begin{tabular}{l@{\hit@title@csep}l}
4535   {\heiti \hit@put@title{\hit@cauthortitle}} & \hit@cauthor\\
4536   {\heiti \hit@put@title{\hit@csupervisortitle}} & \hit@csupervisor\\
4537     \ifx\hit@cassosupervisor\empty\else%
4538   {\heiti \hit@put@title{\hit@cassosupervisortitle}}& \hit@cassosupervisor\\
4539     \fi
4540     \ifx\hit@ccosupervisor\empty\else%
4541   {\heiti \hit@put@title{\hit@ccosupervisortitle}} & \hit@ccosupervisor\\
4542     \fi
4543   {\heiti \hit@put@title{\hit@cdegreetitle}} & \hit@cdegree\\
4544   {\heiti \hit@put@title{\hit@csubjecttitle}} & \hit@csubject\\
4545   {\heiti \hit@put@title{\hit@caffilttitle}} & \hit@caffil\\

```

```

4546 {\heiti \hit@put@title{\hit@cdate@title}} & \hit@cdate\\
4547 {\heiti \hit@put@title{\hit@cschoolnametitle}} & \hit@cschoolname
4548 \end{tabular} \renewcommand{\arraystretch}{1}
4549 \end{center} }
4550 \end{center}
4551 }
4552 % 英文封面
4553 \newcommand{\emultiline}[2][c]{\renewcommand{\arraystretch}{1}\begin{tabular}[#1]{@{}l@{}}#2\end{tabular}}
4554 \newcommand{\hit@engcover}{
4555 {
4556 \xiaosi[1.667]\noindent Classified Index: \hit@natclassifiedindex \\\[8pt]
4557 U.D.C: \hit@intclassifiedindex }
4558 \vspace*{1em}
4559 \begin{center}
4560 \parbox[t][1.6cm][t]{\textwidth}{\begin{center} \end{center} }
4561 \parbox[t][3.5cm][t]{\textwidth}{\xiaor[1]
4562 \begin{center}Dissertation for the {\hit@exuweier} Degree in \hit@exueke\end{center}
4563 \ifhit@fulltime\relax\else\begin{center}\hit@ebraceleft\hit@estudenttype\hit@ebraceright\end{center}
与中文保持一致, 删除 in {\hit@exueke}
4564 \parbox[t][7cm][t]{\textwidth}{%
4565 \begin{center}%
4566 \settowidth{\hit@etitlelength}{\erhao\hit@etitle\ifhit@subtitle\hit@title@esep\hit@esubtitle\fi}%
4567 \ifdim\hit@etitlelength>450mm\xiaor\else\erhao\fi%
4568 \textbf{\MakeUppercase{\hit@etitle}%
4569 \ifhit@subtitle\hit@title@esep\MakeUppercase{\hit@esubtitle}\fi}\end{center}}
4570 %若信息内容不太长, 不会引起信息内容分行时, 使用 tabular 环境, 否则使用下面的 tabularx 环境。
4571 {\sihao\renewcommand{\arraystretch}{1.3}
4572 \begin{tabular}{@{}l@{~}l@{}}
4573 \textbf{\hit@eauthortitle\hit@title@esep} & \hit@eauthor\\
4574 \textbf{\hit@esupervisortitle\hit@title@esep} & \hit@esupervisor\\
4575 \ifx\hit@eassosupervisor\@empty\else%
4576 \textbf{\hit@eassosupervisortitle\hit@title@esep} & \hit@eassosupervisor\\
4577 \fi
4578 \ifx\hit@ecosupervisor\@empty\else%
4579 \textbf{\hit@ecosupervisortitle\hit@title@esep} & \hit@ecosupervisor\\
4580 \fi
4581 \textbf{\hit@edegreetitle\hit@title@esep} & \hit@edegree\\
4582 \textbf{\hit@esubjecttitle\hit@title@esep} & \hit@esubject\\
4583 \textbf{\hit@eaffilttitle\hit@title@esep} & \hit@eaffil\\
4584 \textbf{\hit@edatetitle\hit@title@esep} & \hit@edate\\
4585 \textbf{\hit@eschoolnametitle\hit@title@esep} & \hit@eschoolname
4586 \end{tabular}\renewcommand{\arraystretch}{1}}
4587 \end{center}
4588 }
4589
4590 \def\makecover{

```

```

4591 \phantomsection
4592 \pdfbookmark[0]{\hit@ctitle}{ctitle}
4593 \xiaosi[1]%

4594 \begin{titlepage}
4595   \ifhit@weihai
4596     \ifhit@bachelor
4597       \relax
4598     \else
4599       \hit@first@titlepage
4600       \ifhit@library\clearpage\else\cleardoublepage\fi
4601     \fi
4602   \else
4603     \hit@first@titlepage
4604     \ifhit@library\clearpage\else\cleardoublepage\fi
4605   \fi
4606   \hit@second@titlepage
4607   \ifhit@library\clearpage\else\cleardoublepage\fi
4608   \ifhit@postdoc
4609   \relax
4610   \else

```

博后没有英文封皮

```

4611   \ifhit@bachelor
4612   \relax
4613   \else
4614   \phantomsection
4615   \pdfbookmark[0]{\hit@etitle}{etitle}
4616   \hit@engcover
4617   \ifhit@library\clearpage\else\cleardoublepage\fi
4618   \fi
4619   \fi
4620 \end{titlepage}
4621 \normalsize
4622 \hit@makeabstract}

```

生成参考文献和关键字。

```

4623 \newbox\hit@kw
4624 \newcommand\hit@put@keywords[2]{%
4625   \begin{group}
4626     \setbox\hit@kw=\hbox{#1}
4627     \noindent\hangindent\wd\hit@kw\hangafter1%
4628     \box\hit@kw#2\par
4629   \end{group}}
4630
4631 \newcommand{\hit@makeabstract}{%
4632   \ifhit@openright\cleardoublepage\else\clearpage\fi
4633   \ifhit@english

```

```

4634 \addtocontents{toc}{~\hfill\textbf{Page}\par}
4635 \addtocontents{\ext@table}{{\noindent\sihao\textbf{Table}~\hfill\textbf{Page}}\par}%
4636 \addtocontents{\ext@figure}{{\noindent\sihao\textbf{Figure}~\hfill\textbf{Page}}\par}%
4637 \fi

```

英文版目录之前有 page 行

```

4638 \hit@appendix@chapter*{\cabstracname}{\cabstracname}
4639 \pagestyle{hit@headings}
4640 \pagenumbering{Roman}
4641 \hit@cabstrac
4642 \vskip12bp
4643 \hit@put@keywords{\ifhit@postdoc\bfseries\fi\heiti\hit@ckeywords@title}{\hit@ckeywords}

```

博后关键字加粗

```

4644 \ifhit@openright\cleardoublepage\else\clearpage\fi
4645 \hit@appendix@chapter*{\eabstracname}{\eabstracname}
4646 \hit@eabstrac
4647 \vskip12bp
4648 \hit@put@keywords{\textbf{Keywords:\enskip}}{\hit@ekeywords}

```

定义符号表。

```

4649 \newenvironment{denotation}[1][2.5cm]{%
4650 \ifhit@openright\cleardoublepage\else\clearpage\fi
4651 \hit@appendix@chapter*{\hit@denotation@ctitle}{\hit@denotation@etitle}
4652 \setcounter{table}{0}}
4653 \renewcommand{\thetable}{\arabic{table}}% 使表编号为 1 的格式
4654 }{\renewcommand{\thetable}{\arabic{chapter}-\arabic{table}}% 使表编号为 7-1 的格式
4655 \setcounter{table}{0}}%

```

定义索引、目录格式

```

4656 \def\hit@starttoc#1{% #1: float type, prepend type name in \listof*** entry.
4657 \let\oldnumberline\numberline
4658 \def\numberline##1{\oldnumberline{\csname #1name\endcsname\hskip.4em ##1}}
4659 \@starttoc{\csname ext@#1\endcsname}
4660 \let\numberline\oldnumberline}
4661 \def\hit@listof#1#2{% #1: float type
4662 \ifhit@openright\cleardoublepage\else\clearpage\fi
4663 \hit@appendix@chapter*[\csname list#1name\endcsname]{\csname list#1name\endcsname}[#2]
4664 \hit@starttoc{#1}}

```

只有英文版用到，且需要 clearpage

```

4665
4666
4667 \renewcommand\listoffigures{\hit@listof{figure}{\listfigureename}}
4668 \renewcommand*\l@figure{\addvspace{6bp}\@dottedtocline{1}{0em}{4em}}
4669 \renewcommand\listoftables{\hit@listof{table}{\listtableename}}
4670 \let\l@table\l@figure
4671 \def\ext@equation{loe}

```

```

4672 \def\equcaption#1{%
4673   \addcontentsline{\ext@equation}{equation}%
4674     {\protect\numberline{#1}}}
4675 \newcommand\listofequations{\hit@listof{equation}{\listequationname}}
4676 \let\l@equation\l@figure

```

4.5.10 目录

本科文科生要求目录有四级。

```

4677 \setcounter{secnumdepth}{3}
4678 \setcounter{tocdepth}{2}
4679 \ifhit@bachelor\ifhit@tocfour\setcounter{tocdepth}{3}\fi\fi

```

工大论文目录中的潜规则：目录中的目录位置是空白。

```

4680 \renewcommand\tableofcontents{%
4681 \ifhit@openright\cleardoublepage\else\clearpage\fi
4682 \phantomsection
4683 \markboth{\contentsname}{ccontent}
4684 \hit@chapter*{\contentsname}
4685 \pdfbookmark[0]{\contentsname}{ccontent}
4686 \normalsize\@starttoc{toc}
4687 \ifhit@doctor
4688 \tableofengcontents
4689 \fi

```

将英文目录潜入中文目录命令中，进一步简化 thesis.tex 结构

```

4690 \ifhit@english
4691 \printnoidxglossary[sort=word,style=engstyle,title={Nomenclature},nopostdot,nonumberlist]
4692 \listoftables
4693 \listoffigures
4694 \fi
4695 }

```

添加英文 toc 控制 按照我工要求的目录格式。

```

4696 \ifhit@arialtoc
4697   \def\hit@toc@font{\sffamily}
4698 \fi
4699 \def\@pnumwidth{4em}% 规定中的提前悬挂
4700 \def\@tocrmarg{\@pnumwidth}
4701 \def\@dotsep{1}

```

此处临时更改一下对齐方式。CT_EX 似乎无法应对双语目录。todo:

```

4702 \setlength\@tempdima{4em}%
4703 \patchcmd{\@dottedtocline}{#4}{\csname hit@toc@font\endcsname #4}{}{}
4704 \patchcmd{\@dottedtocline}{\hb@xt@\@pnumwidth}{\hbox}{}{}
4705 \renewcommand*\l@chapter[2]{%
4706   \ifnum \c@tocdepth > \m@ne
4707     \addpenalty{-\@highpenalty}%

```

```

4708 %\vskip 4bp \@plus\p@
4709 \begingroup
4710 \parindent \z@ \rightskip \@pnumwidth
4711 \parfillskip -\@pnumwidth
4712 \leavevmode
4713 \advance\leftskip\@tempdima
4714 \hskip -\leftskip
4715 % numberline is called here, and it uses \@tempdima

```

修改本科生论文目录格式 本科目录添加加粗

```

4716 {\ifhit@bachelor\rmfamily\else\csname
4717 hit@toc@font\endcsname\fi\heiti\ifhit@postdoc\bfseries\fi\ifhit@chapterbold\ifhit@bachelor\bfseries\fi}

```

博后和英文版需要加粗

```

4718 \leaders\hbox{$\m@th\mkern \@dotsep mu\hbox{.}\mkern \@dotsep mu$}\hfill
4719 \nobreak{\normalfont\normalcolor #2}\par
4720 \penalty\@highpenalty
4721 \endgroup
4722 \fi}

```

按工大标准, 缩小目录中各级标题之间的缩进, 使它们相隔一个字符距离, 也就是 12pt。

```

4723 \renewcommand*\l@section{\@dottedtocline{1}{1em}{1.8em}}
4724 \renewcommand*\l@subsection{\@dottedtocline{2}{2em}{2.5em}}
4725 \renewcommand*\l@subsubsection{\@dottedtocline{3}{3\ccwd}{3.1em}}

```

英文目录格式。

```

4726 \def\@dotsep{0.75} % 定义英文目录的点间距
4727 \setlength\leftmargini {0pt}
4728 \setlength\leftmarginii {0pt}
4729 \setlength\leftmarginiii {0pt}
4730 \setlength\leftmarginiv {0pt}
4731 \setlength\leftmarginv {0pt}
4732 \setlength\leftmarginvi {0pt}
4733
4734 \def\engcontentsname{\bfseries Contents}
4735 \newcommand\tableofengcontents{

```

此处添加英文目录的章标题格式, 默认细点

```

4736 \def\l@chapter{\@dottedtocline{0}{0em}{5em}}% 控制英文目录: 细点\@dottedtocline 粗点\@dottedtoclineb
4737 \@restonecolfalse
4738 \chapter*{\engcontentsname %chapter* 上移一行, 避免在 toc 中出现。
4739 \pdfbookmark[0]{Contents}{econtent}
4740 \@mkboth{%
4741 \engcontentsname}{\engcontentsname}}

```

此处临时更改一下对齐方式。CT_EX 似乎无法应对双语目录。删除增加\hangindent 的方法, 其原因是\numberline 多出一个空格

```

4742 \@starttoc{toe}%
4743 \if@restonecol\twocolumn\fi}

```

```
4744 \def\dotsep{0.75} % 定义英文目录的点间距
```

目录中附录的章号格式。

```
4745 \ctexset{%
4746   appendix/number=\ifhit@bachelor\arabic{chapter}\else\Alph{chapter}\fi,
4747 }
```

设置附录、结论、参考文献等格式。

```
4748 \let\hit@appendix\appendix
4749 \renewenvironment{appendix}{%
4750   \let\title\hit@appendix@title
4751   \hit@appendix
4752   \ifhit@bachelor\renewcommand{\thechapter}{\arabic{chapter}}\fi
4753 }{%
4754   \let\title\@gobble}
4755 \let\title\@gobble
4756 \newcommand{\hit@appendix@title}[1]{%
4757   \begin{center}
4758     \bfseries\xiaosi #1
4759   \end{center}}
4760 \newlist{translationbib}{enumerate}{1}
4761 \setlist[translationbib]{label=[\arabic*],align=left,nosep,itemsep=6bp,
4762   leftmargin=10mm,labelsep=!,before=\vspace{0.5\baselineskip}\wuhao[1.3]}
4763
4764
4765 \newenvironment{conclusions}{%
4766 \ifhit@openright\cleardoublepage\else\clearpage\fi
4767 \ifhit@english
4768 \hit@appendix@chapter*\hit@conclusion@etitle}
4769 \else
4770 \hit@appendix@chapter*\hit@conclusion@ctitle[\hit@conclusion@etitle]
4771 \fi
4772 }{}
4773 \newenvironment{acknowledgements}{%
4774 \ifhit@openright\cleardoublepage\else\clearpage\fi
4775 \ifhit@english
4776 \hit@appendix@chapter*\hit@acknowledgement@etitle}
4777 \else
4778 \hit@appendix@chapter*\hit@acknowledgement@ctitle[\hit@acknowledgement@etitle]
4779 \fi}{}
4780
4781 \newenvironment{correspondingaddr}{%
4782 \ifhit@openright\cleardoublepage\else\clearpage\fi
4783 \hit@appendix@chapter*\hit@correspondingaddr@ctitle}{}}
```

博后用到的通讯页面

```
4784
4785
```



```

4786 \newenvironment{resume}{%
4787   \ifhit@openright\cleardoublepage\else\clearpage\fi
4788   \hit@appendix@chapter*{\hit@resume@ctitle}[\hit@resume@etitle]}{}
4789 \newenvironment{publication}{%
4790   \ifhit@openright\cleardoublepage\else\clearpage\fi
4791   \hit@appendix@chapter*{\hit@publication@ctitle}[\hit@publication@etitle]}{}
4792
4793
4794 \newenvironment{doctorpublication}{%
4795   \ifhit@openright\cleardoublepage\else\clearpage\fi
4796   \hit@appendix@chapter*{\hit@doctorpublication@ctitle}}{}

```

此处添加博后用到的博士生发表页面 此处中英文索引的格式设置尽量符合《[哈尔滨工业大学研究生学位论文撰写规范](#)》中给出的示例的格式。此处间距常数是人工调节的。

```

4797 \newenvironment{ceindex}{%
4798   \ifhit@openright\cleardoublepage\else\clearpage\fi
4799   \hit@appendix@chapter*{\indexname}[\hit@index@etitle]
4800   \setlength{\columnsep}{4em}
4801   \begin{adjustwidth}{2em}{2em}
4802     \begin{multicols*}{2}}{\end{multicols*}}
4803   \end{adjustwidth}
4804 }
4805
4806 \newlist{idxwordlist}{description}{3}
4807 \setlist[idxwordlist, 1]{%
4808   itemsep=\baselineskip,
4809   labelindent=8em,
4810   font=\normalsize\bfseries,
4811 }
4812 \setlist[idxwordlist, 2]{%
4813   nosepe,
4814   labelindent=2em,
4815   font=\wuhao\rm,
4816 }
4817 \setlist[idxwordlist, 3]{%
4818   nosepe,
4819   labelindent=4em,
4820   font=\wuhao\rm,
4821 }
4822 \def\hit@authorization@other{%
4823   \ifhit@openright\cleardoublepage\else\clearpage\fi
4824   \hit@appendix@chapter*{\hit@authorization@ctitle}[\hit@authorization@etitle]
4825   \xiaosi[1.6]\vspace{\baselineskip}
4826   \begin{center}\xiaosan\heiti\hit@declarename\end{center}
4827   \par\hit@declaretext
4828   \vspace{\baselineskip}

```

```

4829 \par\hspace{6em}\hit@author sig\hfill\hit@frontdate\hit@datefill
4830 \vspace{2\baselineskip}
4831 \begin{center}\xiaosan\heiti\hit@authorizationtitle\end{center}
4832 \par\hit@authorizationtext
4833 \vspace{2\baselineskip}
4834 \par\hspace{6em}\hit@author sig\hfill\hit@frontdate\hit@datefill
4835 \ifhit@english\vspace{\baselineskip}\else\vspace{2\baselineskip}\fi

英文版和中文版这里的间距不一样

4836 \par\hspace{6em}\hit@teachersig\hfill\hit@frontdate\hit@datefill}
4837 \def\hit@authorization@bachelor{%
4838   \ifhit@openright\cleardoublepage\else\clearpage\fi
4839   \hit@appendix@chapter*\hit@declarename@bachelor}
4840   \hit@authorizationtext@bachelor
4841 \vspace{2\baselineskip}
4842 \par\hspace{6em}\hit@author sig\hfill\hit@frontdate\hit@datefill
4843 }
4844
4845 \NewDocumentCommand{\authorization}{o}{%
4846   \IfNoValueTF{#1}{%
4847     \ifhit@bachelor\hit@authorization@bachelor\else\hit@authorization@other\fi
4848   }{%
4849     \includepdf[fitpaper=true,pagecommand={%
4850 \thispagestyle{hit@empty}%
4851 \phantomsection\addcontentsline{toc}{chapter}{\ifhit@bachelor\hit@declarename@bachelor\else\hit@authorization@doctor}
4852 \ifhit@doctor%
4853 \addcontentsline{toe}{chapter}{\texorpdfstring{\bfseries \hit@authorization@etitle}{\hit@authorization@etitle}}
4854 \fi%
4855   }]{#1}%
4856 }%
4857 }
4858
4859 \newcommand\bibstyle@numerical{\bibpunct{[ ]}{,}{s}{,}{\textsuperscript{,}}{,}}
4860 \newcommand\bibstyle@authoryear{\bibpunct{( )}{;}{a}{,}{,}}

4861 \newcommand\bibstyle@inline{\bibpunct{[ ]}{,}{n}{,}{\hit@inline@sep}}
4862 \citestyle{numerical}
4863 \DeclareRobustCommand\inlinecite{\@inlinecite}
4864 \def\@inlinecite#1{\begingroup\citestyle{inline}\let\@cite\NAT@citenum\citep{#1}\endgroup}
4865 \let\onlinecite\inlinecite
4866 \renewenvironment{thebibliography}[1]{%
4867   \ifhit@openright\cleardoublepage\else\clearpage\fi\phantomsection%
4868   \hit@appendix@chapter*\bibname}[1]{\hit@bibname@etitle}
4869   \normalsize
4870   \list{\@biblabel{\@arabic{c@enumiv}}}%
4871   {\renewcommand{\makelabel}[1]{##1\hfill}}
4872   \settowidth{\labelwidth}{\@biblabel{#1}}

```

```

4873 \setlength{\labelsep}{0.5em}
4874 \setlength{\itemindent}{0pt}
4875 \setlength{\leftmargin}{\labelsep+\labelwidth}
4876 \addtolength{\itemsep}{-0.8em}
4877 \usecounter{enumiv}%
4878 \let\p@enumiv\@empty
4879 \renewcommand\theenumiv{\@arabic\c@enumiv}}%
4880 \sloppy\frenchspacing

4881 \flushbottom

4882 \ifhit@splitbibitem
4883 \clubpenalty0
4884 \@clubpenalty \clubpenalty
4885 \widowpenalty0%
4886 \interlinepenalty-50%
4887 \else
4888 \clubpenalty4000
4889 \@clubpenalty \clubpenalty
4890 \widowpenalty4000%
4891 \interlinepenalty4000%
4892 \fi
4893 \sfcode'\.\@m}
4894 {\def\@noitemerr
4895 {\@latex@warning{Empty 'thebibliography' environment}}}%
4896 \endlist\frenchspacing}
4897 \patchcmd\NAT@citexnum{%
4898 \@ifnum{\NAT@ctype=\z@}{%
4899 \if*#2*\else\NAT@cmt#2\fi
4900 }{}}%
4901 \NAT@mbox{\NAT@@close}%
4902 }{%
4903 \NAT@mbox{\NAT@@close}%
4904 \@ifnum{\NAT@ctype=\z@}{%
4905 \if*#2*\else\textsuperscript{#2}\fi
4906 }{}}%
4907 }{}{}
4908 \renewcommand\NAT@citesuper[3]{\ifNAT@swa
4909 \if*#2*\else#2\NAT@spacechar\fi
4910 \unskip\kern\p@\textsuperscript{\NAT@@open#1\NAT@@close\if*#3*\else#3\fi}%
4911 \else #1\fi\endgroup}
4912 \patchcmd{\NAT@citex}{%
4913 \if*#2*\else\NAT@cmt#2\fi
4914 \if\relax\NAT@date\relax\else\NAT@@close\fi
4915 }{%
4916 \if\relax\NAT@date\relax\else\NAT@@close\fi
4917 \if*#2*\else\textsuperscript{#2}\fi

```

```

4918 }{}{}
4919 \renewcommand\NAT@cite%
4920 [3]{\ifNAT@swa\NAT@@open\if*#2*\else#2\NAT@spacechar\fi
4921 #1\NAT@@close\if*#3*\else\textsuperscript{#3}\fi\else#1\fi\endgroup}
4922 </bookcls>

```

4.6 其它

在模板文档结束时即装入配置文件，这样用户就能在导言区进行相应的修改。

```

4923 <*bookcls>
4924 \AtEndOfClass{\input{hithesisbook.cfg}}
4925 \AtEndOfClass{\sloppy}
4926 </bookcls>

```

5 修改记录

v1.0.1	General: 添加了捐助、矢量化本科论文模板的图片 logo 24	v1.0.3	General: 默认开启 raggedbottom 87
v1.0.10	General: 修改了索引的间距，使其更符合规范中的示例 92, 93, 137	v1.0.4	General: 修正英文目录中换行时无法对齐的 bug 135 将 leftskip 设置参数至于外侧，以便后续添加可以适应标题长度的\contentsline 方法 134
v1.0.11	General: 更改的中文标题，根据反馈，在封面中标题需要自由换行且不能影响到原创性声明。此处额外设置了一个变量 ctitlecover。..... 117, 128	v1.0.5	\subsubsection: 添加\ignorespaces 选项，矫正英文目录多出一个空白而无法对其的 bug 115, 116 General: 彻底修正英文目录中换行时无法对齐的 bug 135 矫正英文目录缩进与中文目录一致的 bug .. 135
v1.0.12	General: 修正 float 为 p 状态时默认不居中 bug 105	v1.0.6	\@makecaption: 此处更改了选项的名称 105 General: 删除 caption hang 的默认设置，因为不在规范要求中 107 此处更改了选项的名称 88 此处添加子图最后一行图题是否居选项中选项 88, 92
v1.0.13	\subsubsection: 添加\texorpdfstring 命令去除书签中带有格式时的警告 115 General: 此处删除冗余的 Abstract 标题 109 此处添加中文目录中 Abstract 是否均为大写选项 88, 113 添加\texorpdfstring 命令去除书签中带有格式时的警告 114, 138	v1.0.7	\@makecaption: 优化了最后一行居中算法，使其两边对齐、单词内部断行 105
v1.0.14	General: 修正自动生成日期 bug 109	v1.0.8	General: 修改附录中图、表、公式数字编码 .. 105 删除冗余公式符号定义 107
v1.0.15	\hit@headings: 删除冗余的页面格式 96 添加控制本科论文的页码横线选项 96 General: 添加控制本科论文的页码横线选项 .. 88	v1.0.9	General: 修正 float 垂直间距 bug 104 添加 debug 包 92
v1.0.2	General: 添加了思源字体说明 89		

v2.0.0	添加英文版页眉格式控制 97
General: 此处删除 newgeometry 选项 88	\mainmatter: 添加英文版限制 94
此处添加 geometry 选项 86, 87	General: 博后关键字加粗 133
添加版芯设置选项 91	博后和英文版附录 title 124
v2.0.1	博后和英文版需要加粗 135
General: 去除定理注释括号 107	博后没有英文封皮 132
v2.0.10	博后用到的通讯页面 136
\cleardoublepage: 添加 openright 和 library 逻辑 93	只有英文版用到, 且需要 clearpage 133
General: 此处添加提交图书馆电子版的逻辑 . . 132	将英文目录潜入中文目录命令中, 进一步简化 thesis.tex 结构 134
此处添加是否为提交图书馆电子版 88	更改原 cls 文件名为 hithesisbook 25
v2.0.11	此处添加 book 控制项, 用于 cfg 中定理等控制 86
\mainmatter: 设置第一章必须在奇数页 94	此处添加博后用到的博士生发表页面 137
v2.0.2	此处添加博后选项 86, 89
General: 取出了定理冒号 100	此处添加英文版和博后的 title 设置 113
v2.0.3	此处添加语言选项 87
General: 添加参考文献分割开关 88, 139	添加 artcls 76
设置公式前后随意断页 99	添加 Article 和 English 版本以及 postdoc 版
v2.0.4	本标题名称设置 108
General: 删除 \@fpsep 设置, 似乎没有什么用 105	添加博后封皮 127
删除表段后空白距离 105	添加博后封皮 title 的选项 122
更新 \intextsep\textfloatsep\floatsep	添加博后封皮的 title 选项 117
间距为正文行间距 105	添加博后摘要 109
更新图段后空白距离 105	添加博后标题格式 110
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