SJTUThesis：上海交通大学学位论文模板

SJTUG

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简介

此宏包旨在建立一个简单易用的上海交通大学论文模板，包括学士、硕士、博士学位论文以及普通课程论文。

免责声明

1. 本模板的发布遵守 LaTeX Project Public License，使用前请认真阅读协议内容。
2. 本模板根据《上海交通大学博士、硕士学位论文撰写指南》以及《上海交通大学本科生毕业设计（论文）撰写规范》编写而成，同时参考了《上海交通大学研究生学位论文格式的统一要求》。旨在供上海交通大学准毕业生撰写学位论文使用。
3. 此模板仅为撰写指南的参考实现，不保证审查老师不提意见。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 LaTeX 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 介绍

这是为撰写上海交通大学学士、硕士、博士学位论文以及课程论文而准备的 LaTeX 模板。

最早的一版学位模板由一位热心的物理系同学制作，中文字符处理采用了当时最为流行的 CJK-LaTeX 方案。在此基础上，weijianwen 根据交大研究生院对学位论文的要求，完成了一份基本可用的交大 LaTeX 学位论文模板。由于 CJK-LaTeX 方案不易使用，weijianwen 与 William Wang 开始着手把模板向 XeLaTeX 引擎移植。之后 weijianwen 又断断续续做了一些完善模板的工作，在原有硕士学位论文模板的基础上完成了交大学士和博士学位论文模板。

2012 年 5 月模板开始在 GitHub 上管理和更新，2018 年 1 月项目转移至 SJTUG 名下。2019 年 6 月 Alexara Wu 重构了整个宏包的代码，并使用 doc 和 DocStrip 工具进行代码的管理，升级版本号为 1.0。

说明： 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，否则即使用了 *SJTUThesis* 也难以保证输出的论文符合学校规范。

2 简明教程

2.1 文件组成

表 1 列出了 SJTUThesis 的主要文件及其功能介绍。

表 1: 模板的文件组成

类别	文件	说明
文档类	sjtuthesis.cls	文档类文件
	sjtuthesis-*.ltx	文档类辅助文件
视觉系统	sjtu-vi-logo-*.pdf	校标图片
	sjtu-vi-badge-*.pdf	校徽图片
	sjtu-vi-name-*.pdf	校名图片

2.2 获取 SJTUThesis

你可以在 GitHub Release 中找到 SJTUThesis 的所有版本，推荐使用最新版本以避免一些问题。

2.3 使用 SJTUThesis 文档类

以下是一份简单的 TeX 文档，它演示了 SJTUThesis 的最基本用法。注意在使用文档类时，需要将涉及到的所有源文件使用 UTF-8 编码保存。

```
% main.tex
\documentclass{sjtuthesis}
\begin{document}
```

```
  \maketitle
  \frontmatter
  \mainmatter
  \chapter{欢迎}
  \section{欢迎使用 \sjtuthesis}
  你好，\LaTeX{}!
\end{document}
```

按照 2.4 小节中的方式编译该文档，您应当得到一篇 5 页的文章。当然，这篇文章的绝大部分都是空白的。

2.4 编译方式

本模版仅支持 XeLaTeX 引擎。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。

假设您的 TeX 源文件名为 `main.tex`，并且使用 `biber` 作为管理引用文献的后端程序。下面给出编译论文的详细过程（`#` 开头的行为注释）：

```
# 1.发现文件中的引用关系，文件后缀 .tex 可省略
xelatex main
# 2.编译参考文件源文件，生成 .bbl 文件
biber main
# 3.解决文件中的交叉引用
xelatex main
# 4.生成完整的 pdf 文件
xelatex main
# 5.更新目录
xelatex main
```

手动逐步编译的方式比较繁琐，而且容易出错。推荐使用自动工具 `latexmk`。`latexmk` 命令支持全自动生成 LaTeX 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。

```
# 一条命令就够了!
latexmk -xelatex thesis
```

2.5 模板选项

所谓“模板选项”，指需要在引入文档类的时候指定的选项:

```
\documentclass[⟨模板选项⟩]{sjtuthesis}
```

部分选项采用 ⟨*key*⟩=⟨*value*⟩ 的形式。当 ⟨*value*⟩ 省略时，将采用默认值。在下文的说明中，将用**粗体**表示默认值。

2.5.1 通用选项

type `type = doctor|master|bachelor|course`
论文类型。四种选项分别代表博士学位论文、硕士学位论文、本科毕业论文和课程论文。

language `language = chinese|english`
论文主要语言。可选中文或英文，该选项会改变文档中的一些标题的名字。

zihao `zihao = -4|5|auto|false`
论文默认字号。默认为 auto，将根据论文类型自动设置研究生为小四号或本科生为五号。

review 盲审模式开关。开启盲审模式将隐去作者姓名、导师姓名、班级、学号等个人信息，删去版权使用授权书、原创性声明和致谢页。默认关闭。

continuous 连续编号开关。开启连续编号后，正文中图、表等浮动体直到附录之前，将从 1 开始连续编号，与章节的编号无关。默认关闭。

oneside 指明论文的单双面模式，默认为 twoside。
twoside

2.5.2 字体选项

fontset `fontset = adobe|fandol|founder|mac|macnew|macold|ubuntu|windows|none|...`
指定中文字库。如果没有指定 fontset 的值，将自动检测用户使用的操作系统，配置相应的字体。

此选项来自于 CTEX 宏包，详情请参阅 CTEX 文档。

注意，Linux 系统下默认的中文字库 Fandol 容易出现缺字的情况。我们建议 Linux 用户自行配置合适的字体。

latinfontset `latinfontset = xits|times|stix|step|termes|pagella|cambria|libertinus|lm|none`
指定西文字体集。SJTUThesis 预定义了一些西文字体组合，具体配置见表 2。

表 2: 西文字体配置

	正文字体	无衬线字体	等宽字体	数学字体
xits	XITS	Source Sans Pro	Source Code Pro	XITS Math
times[a]	Times New Roman	Arial	Courier New	XITS Math
stix	STIX Two Text	Source Sans Pro	Source Code Pro	STIX Two Math
step	STEP	Source Sans Pro	Source Code Pro	STEP Math
termes	TG Termes[b]	TG Heros	TG Cursor	TG Termes Math
pagella	TG Pagella	TG Heros	TG Cursor	TG Pagella Math
cambria	Cambria	Calibri	Consolas	Cambria Math
libertinus	Libertinus Serif	Libertinus Sans	LM Mono[c]	Libertinus Math
lm	LM Roman	LM Sans	LM Mono	LM Math

[a] 本行中，Times New Roman、Arial 和 Courier New 是商业字体，在 Windows 和 macOS 系统上均默认安装。
[b] “TG”是 TeX Gyre 的缩写。
[a] “LM”是 Latin Modern 的缩写。

2.6 参数设置

\sjtusetup `\sjtusetup{⟨键值列表⟩}`

本模板提供了一系列选项，可由您自行配置。载入文档类之后，以下所有选项均可通过统一的命令 \sjtusetup 来设置。

\sjtusetup 的参数是一组由（英文）逗号隔开的选项列表，列表中的选项通常是 ⟨*key*⟩=⟨*value*⟩ 的形式。对于同一项，后面的设置将会覆盖前面的设置。在下文的说明中，将用**粗体**表示默认值。\sjtusetup 支持不同类型以及多种层次的选项设定。键值列表中，“=”左右的空格不影响设置；但需注意，参数列表中不可以出现空行。

```
\sjtusetup{
  info = {
    title             = {上海交通大学学位论文 \LaTeX{} 模板示例文档},
    title*            = {A Sample Document for \LaTeX-based SJTU Thesis Template},
    author            = {某\quad{}某},
    author*           = {Mo Mo},
  },
  style = {
    header-logo-color = red,
  },
  name = {
    publications      = {攻读学位期间完成的论文},
  },
}
```

2.6.1 论文格式

style `style = {⟨键值列表⟩}`

该选项包含许多子项目，用于设置论文格式。具体内容见下。

frontmatter-numbering `frontmatter-numbering = true|false`

选择前文内容是否编号。学士论文默认为 false，其余默认为 true。

indent-headings `indent-headings = fixed|auto|false`

选择节标题是否缩进。fixed 将使用统一的段首缩进 \parindent；auto 会缩进两个字，具体距离和字体大小有关；false 不缩进。学士论文默认为 fixed，其余默认为 false。

header `header = single|double`

选择研究生论文页眉风格。

title-logo-color `title-logo-color = red|blue|black`

选择本科论文标题页中的校名、校徽的颜色。

header-logo-color `header-logo-color = red|blue|black`

选择本科论文页眉中的校标颜色。

float-number-separator `float-number-separator = {⟨分隔符⟩}`

图、表等浮动体编号中的分隔符。

equation-number-separator `equation-number-separator = {⟨分隔符⟩}`

公式编号中的分隔符。

2.6.2 信息录入

info `info = {⟨键值列表⟩}`

该选项包含许多子项目，用于录入论文信息。具体内容见下。以下带“*”的项目表示对应的英文字段。

title `title = {⟨中文标题⟩}`
title* `title* = {⟨英文标题⟩}`

论文标题。如果您的标题过长，建议使用“\\”手动断行。

keywords `keywords = {⟨中文关键字⟩}`
keywords* `keywords* = {⟨英文关键字⟩}`

关键字列表。各关键字之间需使用英文逗号隔开。为防止歧义，可以用分组括号“{...}”把各字段括起来。

author `author = {⟨姓名⟩}`
author* `author* = {⟨英文姓名或拼音⟩}`

作者姓名。

id `id = {⟨学号⟩}`

学号。

supervisor `supervisor = {⟨姓名⟩}`
supervisor* `supervisor* = {⟨英文姓名或拼音⟩}`
assisupervisor `assisupervisor = {⟨姓名⟩}`
assisupervisor* `assisupervisor* = {⟨英文姓名或拼音⟩}`

导师、副导师姓名。

degree `degree = {⟨学位中文名称⟩}`
degree* `degree* = {⟨学位英文名称⟩}`

申请学位中英文名称。

department `department = {⟨院系中文名称⟩}`
department* `department* = {⟨院系英文名称⟩}`

院系中英文名称。

major `major = {⟨专业中文名称⟩}`
major* `major* = {⟨专业英文名称⟩}`

专业中英文名称。

course `course = {⟨课程中文名称⟩}`
course* `course* = {⟨课程英文名称⟩}`

课程中英文名称。仅课程论文有效。

fund `fund = {⟨资助基金中文名称⟩}`
fund* `fund* = {⟨资助基金英文名称⟩}`

资助基金列表。各资助基金名称之间需使用英文逗号隔开。为防止歧义，可以用分组括号“{...}”把各字段括起来。

date　`date = {⟨日期⟩}`

答辩日期。默认值为文档编译日期。也可以自己指定，要求使用 ISO 格式，即 yyyy-mm-dd。

2.6.3 设置名称

name　`name = {⟨键值列表⟩}`

该选项包含许多子项目，用于设置论文中一些标题的名称。具体内容见表 3。

表 3: name 选项的默认设置

选项	language = chinese	language = english
appendix	附录	Appendix
contents	目\hspace{\ccwd} 录	Contents
listfigure	插图索引	List of Figures
listtable	表格索引	List of Tables
listalgorithm	算法索引	List of Algorithms
figure	图	Figure
figure*	Figure	图
table	表	Table
table*	Table	表
algorithm	算法	Algorithm
nomenclature	主要符号对照表	Nomenclature
summary	全文总结	Summary
bib	参考文献	Bibliography
index	索\hspace{\ccwd} 引	Index
acknowledgements	致\hspace{\ccwd} 谢	Acknowledgements
publications	攻读学位期间发表（或录用）的学术论文	Publications
achievements	攻读学位期间获得的科研成果	Research Achievements
resume	个人简历	Resume

2.7 内容编写

2.7.1 标题页和声明页

\maketitle　生成标题页。

\originalitypage　`\originalitypage`

\originalitypage*　`\originalitypage*`

`\originalitypage[⟨声明扫描件⟩]`

生成空白原创性声明。带星号的版本生成的声明页不包含论文标题。接受一个可选参数用于插入原创性声明扫描件。

\copyrightpage　`\copyrightpage`

`\copyrightpage[⟨授权书扫描件⟩]`

生成空白版权使用授权书。接受一个可选参数用于插入版权使用授权书扫描件。

2.7.2 前文部分

\frontmatter 声明前文部分开始。

abstract
abstract*

```
\begin{abstract}
  〈中文摘要〉
\end{abstract}
\begin{abstract*}
  〈英文摘要〉
\end{abstract*}
```

摘要环境。不带星号和带星号的版本分别用来输入中文摘要和英文摘要。

\tableofcontents
\listoffigures
\listoffigures*
\listoftables
\listoftables*
\listofalgorithms
\listofalgorithms*

表 4: 目录和索引表

用途	命令
目录	\tableofcontents
插图索引	\listoffigures \listoffigures*
表格索引	\listoftables \listoftables*
算法索引[a]	\listofalgorithms \listofalgorithms*

[a] 启用 algorithm2e 或 algorithm 后有效。

目录、插图、表格和算法等索引命令如表 4 所示，将其插入到期望的位置即可。带 * 的命令表示对应的索引表不会出现在目录中。

nomenclature
nomenclature*

```
\begin{nomenclature}
  〈符号对照表〉
\end{nomenclature}
```

符号对照表环境。带星号的版本不会出现在目录中。符号对照表环境仅设置标题，内部实现可由用户自行决定。可以使用 longtable，也可以使用 nomencl 宏包。

2.7.3 正文部分

\mainmatter 声明正文部分开始。正文部分是论文的核心，您可以分章节撰写。如有需求，也可以采用多文件编译的方式。

\footnote `\footnote[〈脚注文字〉]`
插入脚注。编号采用中文字体的带圈数字，只支持 1 到 10 号，请保证每页脚注不超过 10 个。

\SJTUunsetfloatfontsize
\SJTUsetfloatfontsize
按学校要求图表内使用五号字体，不受正文环境影响。可在文中使用 \SJTUunsetfloatfontsize 取消此默认设置，或者使用 \SJTUsetfloatfontsize 恢复此默认设置。

SJTUThesis 预定义了一系列的数学环境。在启用 ntheorem 或 amsthm 宏包后有效。

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

\appendix

```
\appendix
\chapter{...}
```

附录由 \appendix 命令开启，然后像正文一样书写。

2.7.4 后文部分

\backmatter 声明后文部分开始。后文部分包含参考文献、致谢等。

acknowledgements

```
\begin{acknowledgements}
  〈致谢内容〉
\end{acknowledgements}
```

致谢环境。盲审模式下致谢将被隐去。

publications
publications*

```
\begin{publications}
  \item 〈发表的学术论文〉
\end{publications}
\begin{publications*}
  \item 〈发表的学术论文（隐去姓名）〉
\end{publications*}
```

学术论文环境。普通模式下显示不带星号的版本中的内容，盲审模式下显示带星号的版本中的内容。

achievements
achievements*

```
\begin{achievements}
  \item 〈获得的科研成果〉
\end{achievements}
\begin{achievements*}
  \item 〈获得的科研成果（隐去姓名）〉
\end{achievements*}
```

科研成果环境。普通模式下显示不带星号的版本中的内容，盲审模式下显示带星号的版本中的内容。

resume

```
\begin{resume}
  〈简历内容〉
\end{resume}
```

简历环境。盲审模式下简历将被隐去。

digest

```
\begin{digest}
  〈英文大摘要〉
\end{digest}
```

学士论文英文大摘要。仅在语言设置为中文，论文类型为学士论文的条件下有效。

3 致谢

SJTUThesis 模板的许多实现细节离不开 热心同学们 的贡献，在此感谢所有为模板贡献过代码的同学们, 以及所有测试和使用模板的各位同学！

4 实现细节

报错和警告命令。

```
⟨*class⟩
\newcommand\sjtu@error[1]{%
  \ClassError{sjtuthesis}{#1}{}%
}
\newcommand\sjtu@warning[1]{%
  \ClassWarning{sjtuthesis}{#1}{}%
}
```

4.1 定义文档选项

```
\RequirePackage{kvdefinekeys}
\RequirePackage{kvsetkeys}
\RequirePackage{kvoptions}
\SetupKeyvalOptions{
  family=sjtu,
  prefix=sjtu@,
  setkeys=\kvsetkeys}
```

\sjtusetup 提供一个 \sjtusetup 命令支持 *key-value* 的方式来设置。

```
\newcommand\sjtusetup[1]{%
  \kvsetkeys{sjtu}{#1}%
}
```

同时用 *key-value* 的方式来定义这些接口：

```
\sjtu@define@key{<family>}{
  <key> = {
    name = <name>,
    choices = {
      <choice1>,
      <choice2>,
    },
    initial = <initial>,
    default = <default>,
  },
}
```

其中 choices 设置允许使用的值；⟨*initial*⟩ 是选项的初始值，默认为 choices 第一个；⟨*default*⟩ 是选项的默认值，默认为 ⟨*initial*⟩；⟨*code*⟩ 是相应的内容被设置时执行的代码。

```
\newcommand\sjtu@define@key[2]{%
  \kvsetkeys{#1@key}{#2}%
}
\newcommand\sjtu@set@family@handler[1]{%
  \kv@set@family@handler{#1@key}{%
```

initial 是定义该 ⟨*key*⟩ 时的初始值，缺省为空。

```
    \def\sjtu@@initial{}%
    \def\sjtu@@choices{}%
    \@namedef{#1@##1@@default}{}%
    \@namedef{#1@##1@@check}{}%
    \@namedef{#1@##1@@code}{}%
```

\sjtusetup 会将 ⟨*value*⟩ 存到 \⟨*family*⟩@⟨*key*⟩，但是宏的名字包含 “-” 这样的特殊字符时不方便直接调用，比如 key = math-style，这时可以用 name 设置 ⟨*key*⟩ 的别称，比如 key = math@style，这样就可以通过 \⟨*family*⟩@math@style 来引用。

```
    \@namedef{#1@##1@@name}{##1}%
    \kv@define@key{#1@value}{name}{%
      \@namedef{#1@##1@@name}{####1}%
    }%
```

保存下 choices = {} 定义的内容，在定义 \⟨*family*⟩@⟨*name*⟩ 后再执行。

```
    \kv@define@key{#1@value}{choices}{%
      \def\sjtu@@choices{####1}%
      \@namedef{#1@##1@@reset}{}%
```

\⟨*family*⟩@⟨*key*⟩@check 检查 value 是否有效，并设置 \if⟨*family*⟩@⟨*name*⟩@⟨*value*⟩。

```
      \@namedef{#1@##1@@check}{%
        \@ifundefined{%
          if#1@\@nameuse{#1@##1@@name}@\@nameuse{#1@\@nameuse{#1@##1@@name}}%
        }{%
          \sjtu@error{Invalid value `##1 = \@nameuse{#1@\@nameuse{#1@##1@@name}}'}%
        }%
        \@nameuse{#1@##1@@reset}%
        \@nameuse{#1@\@nameuse{#1@##1@@name}@\@nameuse{#1@\@nameuse{#1@##1@@name}}true}%
      }%
    }%
    \kv@define@key{#1@value}{initial}{%
      \def\sjtu@@initial{####1}%
      \expandafter\ifx\csname #1@##1@@default\endcsname\@empty
        \@namedef{#1@##1@@default}{####1}%
      \fi
    }%
    \kv@define@key{#1@value}{default}{%
      \@namedef{#1@##1@@default}{####1}%
    }%
    \kvsetkeys{#1@value}{##2}%
    \@namedef{#1@\@nameuse{#1@##1@@name}}{}%
```

第一个 ⟨*choice*⟩ 设为 ⟨*initial*⟩，若 ⟨*default*⟩ 为定义，则设置为 ⟨*initial*⟩，并且对每个 ⟨*choice*⟩ 定义 \if⟨*family*⟩@⟨*name*⟩@⟨*choice*⟩。

```
    \kv@set@family@handler{#1@choice}{%
      \ifx\sjtu@@initial\@empty
        \def\sjtu@@initial{####1}%
      \fi
      \expandafter\ifx\csname #1@##1@@default\endcsname\@empty
        \@namedef{#1@##1@@default}{####1}%
      \fi
      \expandafter\newif\csname if#1@\@nameuse{#1@##1@@name}@####1\endcsname
      \expandafter\g@addto@macro\csname #1@##1@@reset\endcsname{%
        \@nameuse{#1@\@nameuse{#1@##1@@name}@####1false}%
      }%
    }%
    \kvsetkeys@expandafter{#1@choice}{\sjtu@@choices}%
```

将 ⟨*initial*⟩ 赋值到 \⟨*family*⟩@⟨*name*⟩，如果非空则执行相应的代码。

```
    \expandafter\let\csname #1@\@nameuse{#1@##1@@name}\endcsname\sjtu@@initial
    \expandafter\ifx\csname #1@\@nameuse{#1@##1@@name}\endcsname\@empty\else
      \@nameuse{#1@##1@@check}%
    \fi
```

定义 \sjtusetup 接口。

```
    \kv@define@key{#1}{##1}[\@nameuse{#1@##1@@default}]{%
      \@namedef{#1@\@nameuse{#1@##1@@name}}{####1}%
      \@nameuse{#1@##1@@check}%
      \@nameuse{#1@##1@@code}%
    }%
  }
}
```

定义接口向 key 添加 code：

```
\newcommand\sjtu@option@hook[3]{%
  \expandafter\g@addto@macro\csname #1@#2@@code\endcsname{#3}%
}
\sjtu@set@family@handler{sjtu}
\sjtu@define@key{sjtu}{
  type = {
    choices = {
      doctor,
      master,
      bachelor,
      course,
    },
  },
```

论文语言。

```
  language = {
```

```
    choices = {
      chinese,
      english,
    },
  },
```

字号。

```
  zihao = {
    choices = {
      -4,
      5,
      auto,
      false,
    },
    initial = auto,
  },
```

西文字体。

```
  latinfontset = {
    choices = {
      xits,
      times,
      stix,
      step,
      termes,
      pagella,
      cambria,
      libertinus,
      lm,
      none,
    },
  },
}
```

盲审模式开关。

```
\DeclareBoolOption[false]{review}
```

浮动体是否采用连续编号。

```
\DeclareBoolOption[false]{continuous}
```

将选项传递给 ctexbook。

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

解析用户传递过来的选项，并加载 ctexbook。

```
\ProcessKeyvalOptions*
```

设置学位层次。

```
\newif\ifsjtu@type@graduate
\sjtu@type@graduatefalse
\ifsjtu@type@doctor
  \sjtu@type@graduatetrue
```

```
\fi
\ifsjtu@type@master
 \sjtu@type@graduatetrue
\fi
```

设置默认字号。

```
\ifsjtu@zihao@auto
 \ifsjtu@type@graduate
  \def\sjtu@zihao{-4}
 \else
  \def\sjtu@zihao{5}
 \fi
\fi
\PassOptionsToClass{zihao=\sjtu@zihao}{ctexbook}
```

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。并使用 quiet 忽略警告。

```
\PassOptionsToPackage{no-math,quiet}{fontspec}
```

使用 ctexbook 类，优于调用 ctex 宏包。

```
\LoadClass[a4paper,UTF8,scheme=plain,linespread=1.3]{ctexbook}[2018/04/01]
```

根据选项载入配置文件。

```
\AtEndOfClass{
 \ifsjtu@type@graduate
  \input{sjtuthesis-graduate.ltx}
 \else
  \input{sjtuthesis-undergraduate.ltx}
 \fi
}
```

4.2 载入宏包

引用的宏包和相应的定义。

```
\RequirePackage{xparse}
\RequirePackage{etoolbox}
\RequirePackage{filehook}
\RequirePackage{environ}
```

使用 geometry 设置页面。

```
\RequirePackage{geometry}
```

使用 fancyhdr 设置页眉页脚。

```
\RequirePackage{fancyhdr}
```

使用 pageslts 设置页码。

```
\RequirePackage{pageslts}
```

使用 amsmath 处理数学公式。

```
\RequirePackage{amsmath}
```

使用 unicode-math 处理数学字体。

```
\RequirePackage{unicode-math}
```

利用 xeCJKfntef 实现汉字的分散对齐。

```
\RequirePackage{xeCJKfntef}
```

颜色支持宏包。

```
\RequirePackage{xcolor}
```

图形支持宏包。

```
\RequirePackage{graphicx}
```

表格支持宏包。

```
\RequirePackage{array}
```

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

```
\RequirePackage{booktabs}
```

题注支持宏包。

```
\RequirePackage{caption}
\RequirePackage[list=off]{bicaption}
\RequirePackage{subcaption}
```

计数器控制宏包。

```
\RequirePackage{chngcntr}
```

使用 tocloft 设置目录格式。

```
\RequirePackage[titles]{tocloft}
```

enumitem 更好的列表环境。

```
\RequirePackage[inline]{enumitem}
```

脚注支持宏包。

```
\RequirePackage[perpage, bottom, hang]{footmisc}
```

pdfpages 便于我们插入扫描版的原创性声明和授权声明 PDF 文档。

```
\RequirePackage{pdfpages}
\includepdfset{fitpaper=true}
\RequirePackage{url}
```

忽略不必要的警告。

```
\RequirePackage{silence}
\WarningFilter{pageslts}{Package pdfpages detected}
```

对冲突的宏包报错。

```
\newcommand\sjtu@package@conflict[2]{
  \AtBeginOfPackageFile*{#2}{
    \sjtu@error{The `#2' package is incompatible with required `#1'}
  }
}
\sjtu@package@conflict{unicode-math}{amscd}
\sjtu@package@conflict{unicode-math}{amsfonts}
\sjtu@package@conflict{unicode-math}{amssymb}
```

```
\sjtu@package@conflict{unicode-math}{bbm}
\sjtu@package@conflict{unicode-math}{bm}
\sjtu@package@conflict{unicode-math}{eucal}
\sjtu@package@conflict{unicode-math}{eufrak}
\sjtu@package@conflict{unicode-math}{mathrsfs}
```

定义一个补丁命令，失败时给出警告。

```
\newcommand\sjtu@patchcmd[3]{%
  \patchcmd{#1}{#2}{#3}{}%
    {\sjtu@warning{Oops! Command `\protect#1' is NOT patchable.}}
}
```

4.3 定义格式选项

```
\kv@define@key{sjtu}{style}{
  \kvsetkeys{sjtu@style}{#1}
}
\sjtu@set@family@handler{sjtu@style}
\sjtu@define@key{sjtu@style}{
  frontmatter-numbering = {
    name = frontmatter@numbering,
    choices = {
      true,
      false,
    },
  },
  indent-headings = {
    name = indent@headings,
    choices = {
      fixed,
      auto,
      false,
    },
    initial = false,
    default = fixed,
  },
  header = {
    choices = {
      single,
      double,
    },
  },
  title-logo-color = {
    name = title@logo@color,
    choices = {
      red,
      blue,
      black,
```

```
    },
    initial = blue,
  },
  header-logo-color = {
    name = header@logo@color,
    choices = {
      red,
      blue,
      black,
    },
    initial = black,
  },
  float-number-separator = {
    name = fl@num@sep,
    initial = {--},
  },
  equation-number-separator = {
    name = eq@num@sep,
    initial = {--},
  },
}
```

4.4 信息录入

```
\kv@define@key{sjtu}{info}{
  \kvsetkeys{sjtu@info}{#1}
}
\sjtu@set@family@handler{sjtu@info}
\sjtu@define@key{sjtu@info}{
```

论文中英文题目。

```
  title           = { name = title@zh },
  title*          = { name = title@en },
```

关键字。

```
  keywords        = { name = keywords@zh },
  keywords*       = { name = keywords@en },
```

作者。

```
  author          = { name = author@zh },
  author*         = { name = author@en },
```

学号。

```
  id,
```

导师、副导师。

```
  supervisor      = { name = supervisor@zh },
  supervisor*     = { name = supervisor@en },
  assisupervisor  = { name = assisupervisor@zh },
  assisupervisor* = { name = assisupervisor@en },
```

申请学位中英文名称。

```
  degree          = { name = degree@zh },
  degree*         = { name = degree@en },
```

院系中英文名称。

```
  department      = { name = department@zh },
  department*     = { name = department@en },
```

专业中英文名称。

```
  major           = { name = major@zh },
  major*          = { name = major@en },
```

课程中英文名称。

```
  course          = { name = course@zh },
  course*         = { name = course@en },
```

资助基金中英文名称。

```
  fund            = { name = fund@zh },
  fund*           = { name = fund@en },
```

答辩日期。

```
  date            = {%
    initial = {\the\year-\two@digits{\month}-\two@digits{\day}},
  },
}
\newcommand\sjtu@nopar[1]{%
  \begingroup\let\\\@empty#1\endgroup%
}
\newcommand\sjtu@clist@use[2]{%
  \def\sjtu@@tmp{}%
  \def\sjtu@clist@processor##1{%
    \ifx\sjtu@@tmp\@empty
      \def\sjtu@@tmp{#2}%
    \else
      #2%
    \fi
    ##1%
  }%
  \expandafter\comma@parse\expandafter{#1}{\sjtu@clist@processor}%
}
\ifsjtu@language@chinese
  \def\sjtu@info@title{\sjtu@info@title@zh}
  \def\sjtu@info@keywords{\sjtu@info@keywords@zh}
  \def\sjtu@info@author{\sjtu@info@author@zh}
\else
  \def\sjtu@info@title{\sjtu@info@title@en}
  \def\sjtu@info@keywords{\sjtu@info@keywords@en}
  \def\sjtu@info@author{\sjtu@info@author@en}
\fi
```

输出日期的给定格式：`\sjtu@date{⟨format⟩}{⟨date⟩}`，其中格式 ⟨*format*⟩ 接受三个参数分别对应年、月、日，⟨*date*⟩ 是 ISO 格式的日期（yyyy-mm-dd）。盲审模式下隐去日期。

```
\newcommand\sjtu@date[2]{%
  \ifsjtu@review\relax\else
    \edef\sjtu@@date{#2}%
    \def\sjtu@@process@date##1-##2-##3\@nil{%
      #1{##1}{##2}{##3}%
    }%
    \expandafter\sjtu@@process@date\sjtu@@date\@nil
  \fi
}
\newcommand\sjtu@date@format@zh[3]{#1 年 \number#2 月 \number#3 日}
\newcommand\sjtu@date@month@en[1]{%
  \ifcase\number#1\or
    January\or February\or March\or April\or May\or June\or
    July\or August\or September\or October\or November\or December%
  \fi
}
\newcommand\sjtu@date@format@en[3]{\sjtu@date@month@en{#2} \number#3, #1}
```

首先定义 name 接口，设置可供用户修改的各种名称。

```
\kv@define@key{sjtu}{name}{
  \kvsetkeys{sjtu@name}{#1}
}
\sjtu@set@family@handler{sjtu@name}
\sjtu@define@key{sjtu@name}{
  appendix          = { initial = Appendix },
  contents          = { initial = Contents },
  listfigure        = { initial = List of Figures },
  listtable         = { initial = List of Tables },
  listalgorithm     = { initial = List of Algorithms },
  figure            = { initial = Figure },
  figure*           = { name = figure@second, initial = 图 },
  table             = { initial = Table },
  table*            = { name = table@second, initial = 表 },
  algorithm         = { initial = Algorithm },
  nomenclature      = { initial = Nomenclature },
  summary           = { initial = Summary },
  bib               = { initial = Bibliography },
  index             = { initial = Index },
  acknowledgements  = { initial = Acknowledgements },
  publications      = { initial = Publications },
  achievements      = { initial = Research Achievements },
  resume            = { initial = Resume },
}
```

定义各种不会变化的名称。

```
\newcommand\sjtu@name@def[2]{%
  \@namedef{sjtu@name@#1}{#2}
}
\sjtu@name@def{school@zh}{上海交通大学}
```

```
\sjtu@name@def{school@en}{Shanghai Jiao Tong University}
\ifsjtu@type@graduate
  \ifsjtu@type@doctor
    \sjtu@name@def{degree@type@zh}{博士}
    \sjtu@name@def{degree@type@en}{Doctor}
  \else
    \sjtu@name@def{degree@type@zh}{硕士}
    \sjtu@name@def{degree@type@en}{Master}
  \fi
  \sjtu@name@def{author@zh}{\sjtu@name@degree@type@zh 研究生}
  \sjtu@name@def{author@en}{Candidate}
  \sjtu@name@def{id@zh}{学号}
  \sjtu@name@def{id@en}{Student ID}
  \sjtu@name@def{supervisor@zh}{导师}
  \sjtu@name@def{supervisor@en}{Supervisor}
  \sjtu@name@def{assisupervisor@zh}{副导师}
  \sjtu@name@def{assisupervisor@en}{Assistant Supervisor}
  \sjtu@name@def{degree@zh}{申请学位}
  \sjtu@name@def{degree@en}{Academic Degree Applied for}
  \sjtu@name@def{major@zh}{学科}
  \sjtu@name@def{major@en}{Speciality}
  \sjtu@name@def{department@zh}{所在单位}
  \sjtu@name@def{department@en}{Affiliation}
  \sjtu@name@def{defenddate@zh}{答辩日期}
  \sjtu@name@def{defenddate@en}{Date of Defence}
  \sjtu@name@def{conferring@zh}{授予学位单位}
  \sjtu@name@def{conferring@en}{Degree-Conferring-Institution}
  \sjtu@name@def{thesis@type}{学位论文}
  \sjtu@name@def{thesis@kind}{\sjtu@name@thesis@type}
  \sjtu@name@def{subject@zh}{%
    \sjtu@name@school@zh\sjtu@name@degree@type@zh\sjtu@name@thesis@type
  }
  \sjtu@name@def{subject@en}{%
    Dissertation Submitted to \sjtu@name@school@en \\
    for the Degree of \sjtu@name@degree@type@en
  }
\else
  \ifsjtu@type@course
    \sjtu@name@def{degree@type@zh}{}
    \sjtu@name@def{degree@type@en}{}
    \sjtu@name@def{thesis@type}{课程论文}
    \sjtu@name@def{thesis@kind}{\sjtu@name@thesis@type}
    \sjtu@name@def{subject@zh}{\sjtu@name@thesis@type}
    \sjtu@name@def{subject@en}{Course Paper}
  \else
    \sjtu@name@def{degree@type@zh}{学士}
    \sjtu@name@def{degree@type@en}{Bachelor}
    \sjtu@name@def{thesis@type}{学位论文}
```

```
    \sjtu@name@def{thesis@kind}{毕业设计（论文）}
    \sjtu@name@def{subject@zh}{\sjtu@name@degree@type@zh\sjtu@name@thesis@type}
    \sjtu@name@def{subject@en}{Thesis of \sjtu@name@degree@type@en}
  \fi
  \sjtu@name@def{author@zh}{学生姓名}
  \sjtu@name@def{id@zh}{学生学号}
  \sjtu@name@def{supervisor@zh}{指导教师}
  \sjtu@name@def{course@zh}{课程名称}
  \sjtu@name@def{major@zh}{专业}
  \sjtu@name@def{department@zh}{学院（系）}
  \sjtu@name@def{digest}{英文大摘要}
\fi
\sjtu@name@def{orig@subtitle@zh}{原创性声明}
\sjtu@name@def{orig@subtitle@en}{Declaration of Originality}
\sjtu@name@def{copr@subtitle@zh}{版权使用授权书}
\sjtu@name@def{copr@subtitle@en}{Copyright Authorization}
\sjtu@name@def{orig@title}{\sjtu@name@thesis@kind\sjtu@name@orig@subtitle@zh}
\sjtu@name@def{copr@title}{\sjtu@name@thesis@kind\sjtu@name@copr@subtitle@zh}
\sjtu@name@def{title@qouted}{《\sjtu@nopar\sjtu@info@title@zh》}
\sjtu@name@def{origbody}{%
  本人郑重声明：所呈交的\sjtu@name@thesis@kind\sjtu@name@title@qouted ，
  是本人在导师的指导下，独立进行研究工作所取得的成果。除文中已经注明引用
  的内容外，本论文不包含任何其他个人或集体已经发表或撰写过的作品成果。对
  本文的研究做出重要贡献的个人和集体，均已在文中以明确方式标明。本人完全
  意识到本声明的法律结果由本人承担。}
\sjtu@name@def{coprbody}{%
  本\sjtu@name@thesis@kind 作者
  完全了解学校有关保留、使用\sjtu@name@thesis@kind 的规定，同意学校保留
  并向国家有关部门或机构送交论文的复印件和电子版，允许论文被查阅和借阅。
  本人授权\sjtu@name@school@zh 可以将本\sjtu@name@thesis@kind 的全部或部
  分内容编入有关数据库进行检索，可以采用影印、缩印或扫描等复制手段保存和
  汇编本\sjtu@name@thesis@kind 。}
\sjtu@name@def{abstract@zh}{摘\hspace{\ccwd} 要}
\sjtu@name@def{abstract@en}{Abstract}
\sjtu@name@def{keywords@zh}{关键词：}
\sjtu@name@def{keywords@en}{Key words:~}
```

定义根据语言变化的名称。

```
\ifsjtu@language@chinese
  \sjtusetup{
    name = {
      appendix          = {附录},
      contents          = {目\hspace{\ccwd} 录},
      listfigure        = {插图索引},
      listtable         = {表格索引},
      listalgorithm     = {算法索引},
      figure            = {图},
      figure*           = {Figure},
```

```
      table             = {表},
      table*            = {Table},
      algorithm         = {算法},
      nomenclature      = {主要符号对照表},
      summary           = {全文总结},
      bib               = {参考文献},
      index             = {索\hspace{\ccwd} 引},
      acknowledgements  = {致\hspace{\ccwd} 谢},
      publications      = {攻读学位期间发表（或录用）的学术论文},
      achievements      = {攻读学位期间获得的科研成果},
      resume            = {个人简历},
    }
  }
  \ctexset{
    chapter/name    = {第, 章},
    chapter/number  = \chinese{chapter},
  }
  \sjtu@name@def{titlepage}{扉页}
  \sjtu@name@def{subject}{\sjtu@name@subject@zh}
  \sjtu@name@def{orig@subtitle}{\sjtu@name@orig@subtitle@zh}
  \sjtu@name@def{copr@subtitle}{\sjtu@name@copr@subtitle@zh}
  \sjtu@name@def{abstract}{\sjtu@name@abstract@zh}
\else
  \sjtu@name@def{titlepage}{Title Page}
  \sjtu@name@def{subject}{\sjtu@name@subject@en}
  \sjtu@name@def{orig@subtitle}{\sjtu@name@orig@subtitle@en}
  \sjtu@name@def{copr@subtitle}{\sjtu@name@copr@subtitle@en}
  \sjtu@name@def{abstract}{\sjtu@name@abstract@en}
\fi
```

应用名称设置。

```
\ctexset{%
  appendixname   = \sjtu@name@appendix,
  contentsname   = \sjtu@name@contents,
  listfigurename = \sjtu@name@listfigure,
  listtablename  = \sjtu@name@listtable,
  figurename     = \sjtu@name@figure,
  tablename      = \sjtu@name@table,
  bibname        = \sjtu@name@bib,
  indexname      = \sjtu@name@index,
}
```

4.5 西文字体

使用 fontspec 配置西文字体。

XITS 字体于 v1.109 (2018/09/28) 更改了字体的文件名。这里做一些兼容性设置。

```
\let\sjtu@font@family@xits\@empty
\newcommand\sjtu@font@set@xits@names{%
  \ifx\sjtu@font@family@xits\@empty
```

```
    \IfFontExistsTF{XITSMath-Regular.otf}{%
      \gdef\sjtu@font@family@xits{XITS}%
      \gdef\sjtu@font@style@xits@rm{Regular}%
      \gdef\sjtu@font@style@xits@bf{Bold}%
      \gdef\sjtu@font@style@xits@it{Italic}%
      \gdef\sjtu@font@style@xits@bfit{BoldItalic}%
      \gdef\sjtu@font@name@xits@math@rm{XITSMath-Regular}%
      \gdef\sjtu@font@name@xits@math@bf{XITSMath-Bold}%
    }{%
      \gdef\sjtu@font@family@xits{xits}%
      \gdef\sjtu@font@style@xits@rm{regular}%
      \gdef\sjtu@font@style@xits@bf{bold}%
      \gdef\sjtu@font@style@xits@it{italic}%
      \gdef\sjtu@font@style@xits@bfit{bolditalic}%
      \gdef\sjtu@font@name@xits@math@rm{xits-math}%
      \gdef\sjtu@font@name@xits@math@bf{xits-mathbold}%
    }%
  \fi
}
\let\sjtu@font@family@libertinus\@empty
\newcommand\sjtu@font@set@libertinus@names{%
  \ifx\sjtu@font@family@libertinus\@empty
    \IfFontExistsTF{LibertinusSerif-Regular.otf}{%
      \gdef\sjtu@font@family@libertinus@serif{LibertinusSerif}%
      \gdef\sjtu@font@family@libertinus@sans{LibertinusSans}%
      \gdef\sjtu@font@name@libertinus@math{LibertinusMath-Regular}%
      \gdef\sjtu@font@style@libertinus@rm{Regular}%
      \gdef\sjtu@font@style@libertinus@bf{Bold}%
      \gdef\sjtu@font@style@libertinus@it{Italic}%
      \gdef\sjtu@font@style@libertinus@bfit{BoldItalic}%
    }{%
      \gdef\sjtu@font@family@libertinus@serif{libertinusserif}%
      \gdef\sjtu@font@family@libertinus@sans{libertinussans}%
      \gdef\sjtu@font@name@libertinus@math{libertinusmath-regular}%
      \gdef\sjtu@font@style@libertinus@rm{regular}%
      \gdef\sjtu@font@style@libertinus@bf{bold}%
      \gdef\sjtu@font@style@libertinus@it{italic}%
      \gdef\sjtu@font@style@libertinus@bfit{bolditalic}%
    }%
  \fi
}
\newcommand\sjtu@set@font@xits{%
  \sjtu@font@set@xits@names
  \setmainfont{\sjtu@font@family@xits}[
    Extension      = .otf,
    UprightFont    = *-\sjtu@font@style@xits@rm,
    BoldFont       = *-\sjtu@font@style@xits@bf,
    ItalicFont     = *-\sjtu@font@style@xits@it,
```

```
    BoldItalicFont = *-\sjtu@font@style@xits@bfit,
  ]
}
\newcommand\sjtu@set@font@times{%
  \setmainfont{Times New Roman}[Ligatures = Rare]
  \setsansfont{Arial}
  \setmonofont{Courier New}[Scale = MatchLowercase]
}
\newcommand\sjtu@set@font@stix{%
  \setmainfont{STIX2Text}[
    Extension      = .otf,
    UprightFont    = *-Regular,
    BoldFont       = *-Bold,
    ItalicFont     = *-Italic,
    BoldItalicFont = *-BoldItalic,
  ]
}
\newcommand\sjtu@set@font@step{%
  \setmainfont{STEP}[
    Extension      = .otf,
    UprightFont    = *-Regular,
    BoldFont       = *-Bold,
    ItalicFont     = *-Italic,
    BoldItalicFont = *-BoldItalic,
  ]
}
\newcommand\sjtu@set@font@source@sans@mono{%
  \setsansfont{SourceSansPro}[
    Extension      = .otf,
    UprightFont    = *-Regular ,
    ItalicFont     = *-RegularIt ,
    BoldFont       = *-Bold ,
    BoldItalicFont = *-BoldIt,
  ]
  \setmonofont{SourceCodePro}[
    Extension      = .otf,
    UprightFont    = *-Regular ,
    ItalicFont     = *-RegularIt ,
    BoldFont       = *-Bold ,
    BoldItalicFont = *-BoldIt,
    Scale          = MatchLowercase,
  ]
}
\newcommand\sjtu@set@font@termes{%
  \setmainfont{texgyretermes}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
```

```
    ItalicFont     = *-italic,
    BoldItalicFont = *-bolditalic,
  ]%
}
\newcommand\sjtu@set@font@pagella{%
  \setmainfont{texgyrepagella}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-italic,
    BoldItalicFont = *-bolditalic,
  ]%
}
\newcommand\sjtu@set@font@texgyre@sans@mono{%
  \setsansfont{texgyreheros}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-italic,
    BoldItalicFont = *-bolditalic,
  ]%
  \setmonofont{texgyrecursor}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-italic,
    BoldItalicFont = *-bolditalic,
  ]%
}
\newcommand\sjtu@set@font@cambria{%
  \setmainfont{Cambria}
  \setsansfont{Calibri}
  \setmonofont{Consolas}[Scale = MatchLowercase]
}
\newcommand\sjtu@set@font@libertinus{%
  \sjtu@font@set@libertinus@names
  \setmainfont{\sjtu@font@family@libertinus@serif}[
    Extension      = .otf,
    UprightFont    = *-\sjtu@font@style@libertinus@rm,
    BoldFont       = *-\sjtu@font@style@libertinus@bf,
    ItalicFont     = *-\sjtu@font@style@libertinus@it,
    BoldItalicFont = *-\sjtu@font@style@libertinus@bfit,
  ]%
  \setsansfont{\sjtu@font@family@libertinus@sans}[
    Extension      = .otf,
    UprightFont    = *-\sjtu@font@style@libertinus@rm,
    BoldFont       = *-\sjtu@font@style@libertinus@bf,
    ItalicFont     = *-\sjtu@font@style@libertinus@it,
```

```
  ]%
  \setmonofont{lmmonolt10}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-oblique,
    BoldItalicFont = *-boldoblique,
  ]%
}
\newcommand\sjtu@set@font@lm{%
  \setmainfont{lmroman10}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-italic,
    BoldItalicFont = *-bolditalic,
  ]%
  \setsansfont{lmsans10}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-oblique,
    BoldItalicFont = *-boldoblique,
  ]%
  \setmonofont{lmmonolt10}[
    Extension      = .otf,
    UprightFont    = *-regular,
    BoldFont       = *-bold,
    ItalicFont     = *-oblique,
    BoldItalicFont = *-boldoblique,
  ]%
}
```

使用 unicode-math 配置数学字体。

```
\unimathsetup{
  math-style = ISO,
  bold-style = ISO,
  nabla      = upright,
  partial    = upright,
}
\newcommand\sjtu@set@math@font@xits{%
  \sjtu@font@set@xits@names
  \setmathfont{\sjtu@font@name@xits@math@rm}[
    Extension    = .otf,
    BoldFont     = \sjtu@font@name@xits@math@bf,
    StylisticSet = 8,
  ]%
  \setmathfont{\sjtu@font@name@xits@math@rm}[
```

```
    Extension    = .otf,
    BoldFont     = \sjtu@font@name@xits@math@bf,
    StylisticSet = 1,
    range        = {cal,bfcal},
  ]%
}
\newcommand\sjtu@set@math@font@stix{%
  \setmathfont{STIX2Math}[
    Extension    = .otf,
    StylisticSet = 8,
  ]%
  \setmathfont{STIX2Math}[
    Extension    = .otf,
    StylisticSet = 1,
    range        = {cal,bfcal},
  ]%
}
\newcommand\sjtu@set@math@font@step{%
  \setmathfont{STEPMath-Regular}[
    Extension    = .otf,
    BoldFont     = STEPMath-Bold,
    StylisticSet = 8,
  ]%
  \setmathfont{STEPMath-Regular}[
    Extension    = .otf,
    BoldFont     = STEPMath-Bold,
    StylisticSet = 1,
    range        = {cal,bfcal},
  ]%
}
\newcommand\sjtu@set@math@font@termes{%
  \setmathfont{texgyretermes-math.otf}
}
\newcommand\sjtu@set@math@font@pagella{%
  \setmathfont{texgyrepagella-math.otf}
}
\newcommand\sjtu@set@math@font@cambria{%
  \setmathfont{Cambria Math}
}
\newcommand\sjtu@set@math@font@libertinus{%
  \sjtu@font@set@libertinus@names
  \setmathfont{\sjtu@font@name@libertinus@math .otf}%
}
\newcommand\sjtu@set@math@font@lm{%
  \setmathfont{latinmodern-math.otf}%
}
```

设置西文字体集。

```
\newcommand\sjtu@load@fontset@xits{%
  \sjtu@set@font@xits
  \sjtu@set@font@source@sans@mono
  \sjtu@set@math@font@xits
}
\newcommand\sjtu@load@fontset@times{%
  \sjtu@set@font@times
  \sjtu@set@math@font@xits
}
\newcommand\sjtu@load@fontset@stix{%
  \sjtu@set@font@stix
  \sjtu@set@font@source@sans@mono
  \sjtu@set@math@font@stix
}
\newcommand\sjtu@load@fontset@step{%
  \sjtu@set@font@step
  \sjtu@set@font@source@sans@mono
  \sjtu@set@math@font@step
}
\newcommand\sjtu@load@fontset@termes{%
  \sjtu@set@font@termes
  \sjtu@set@font@texgyre@sans@mono
  \sjtu@set@math@font@termes
}
\newcommand\sjtu@load@fontset@pagella{%
  \sjtu@set@font@pagella
  \sjtu@set@font@texgyre@sans@mono
  \sjtu@set@math@font@pagella
}
\newcommand\sjtu@load@fontset@cambria{%
  \sjtu@set@font@cambria
  \sjtu@set@math@font@cambria
}
\newcommand\sjtu@load@fontset@libertinus{%
  \sjtu@set@font@libertinus
  \sjtu@set@math@font@libertinus
}
\newcommand\sjtu@load@fontset@lm{%
  \sjtu@set@font@lm
  \sjtu@set@math@font@lm
}
\newcommand\sjtu@load@fontset@none{\relax}
```

载入西文字体集。

```
\newcommand\sjtu@load@fontset{%
  \@nameuse{sjtu@load@fontset@\sjtu@latinfontset}
}
\sjtu@load@fontset
```

```
\sjtu@option@hook{sjtu}{latinfontset}{%
  \sjtu@load@fontset
}
⟨/class⟩
```

4.6 页面设置

设置纸张、页边距。

```
⟨*(undergraduate | graduate)⟩
\geometry{%
  paper      = a4paper,
⟨*undergraduate⟩
  vmargin    = {84bp, 72bp},
  hmargin    = 90bp,
  headheight = 60bp,
  headsep    = 12bp,
⟨/undergraduate⟩
⟨*graduate⟩
  top        = 3.5cm,
  bottom     = 4.0cm,
  left       = 3.3cm,
  right      = 2.8cm,
  headheight = 1.0cm,
  headsep    = 0.5cm,
⟨/graduate⟩
}
```

fancyhdr 定义页眉页脚很方便，但是有一个非常隐蔽的坑。第一次调用 fancyhdr 定义的样式时会修改 \chaptermark，这会导致页眉信息错误（多余章号并且英文大写）。这是因为在 \ps@fancy 中对 \chaptermark 进行重定义，所以我们先调用 \ps@fancy，再修改 \chaptermark。

```
\pagestyle{fancy}
⟨/(undergraduate | graduate)⟩
```

设置页眉页脚。

```
⟨*class⟩
\def\sjtu@thepage{}
\def\sjtu@lastpageref{}
\newif\ifsjtu@page@numbering \sjtu@page@numberingtrue
⟨/class⟩
⟨*(undergraduate | graduate)⟩
⟨*graduate⟩
\newcommand\sjtu@thepage@format[2]{---~{\bfseries{#1}}~---}
⟨/graduate⟩
⟨*undergraduate⟩
\ifsjtu@language@chinese
  \newcommand\sjtu@thepage@format[2]{第 ~{#1}~ 页\，共 ~{#2}~ 页}
\else
  \newcommand\sjtu@thepage@format[2]{--~~Page~~{#1}~~of~~{#2}~~--}
```

```
\fi
⟨/undergraduate⟩
⟨*graduate⟩
\def\sjtu@info@fund{}
\fancypagestyle{title}{%
  \fancyhf{}
  \fancyfoot[L]{\ifsjtu@review\relax\else\sjtu@info@fund\fi}
  \renewcommand\headrulewidth{0pt}
  \renewcommand\footrulewidth{0pt}
}
⟨/graduate⟩
\fancypagestyle{plain}{%
  \fancyhf{}
⟨*graduate⟩
  \ifsjtu@style@header@single
    \fancyhead[C]{\zihao{-5}\sjtu@name@subject@zh}
  \else
    \fancyhead[RE,LO]{\zihao{-5}\sjtu@name@subject@zh}
    \fancyhead[RO,LE]{\zihao{-5}\leftmark}
  \fi
⟨/graduate⟩
⟨*undergraduate⟩
  \fancyhead[L]{%
    \includegraphics[height=32pt]%
      {sjtu-vi-logo-\sjtu@style@header@logo@color.pdf}
  }
  \fancyhead[R]{%
    \parbox[b]{0.7\textwidth}{%
      \raggedleft\zihao{-5}\heiti\MakeUppercase{\sjtu@info@title}
    }
  }
⟨/undergraduate⟩
  \fancyfoot[C]{%
    \ifsjtu@page@numbering
      \zihao{-5}\sjtu@thepage@format{\sjtu@thepage}{\sjtu@lastpageref}%
    \fi
  }
⟨*graduate⟩
  \renewcommand\headrule{%
    \hrule\@height2.25pt\@width\headwidth
    \vskip 0.75pt
    \hrule\@height0.75pt\@width\headwidth
    \vskip-3.75pt
  }
⟨/graduate⟩
⟨*undergraduate⟩
  \renewcommand\headrulewidth{0.75pt}
⟨/undergraduate⟩
```

```
}
⟨/(undergraduate j graduate)⟩
```

使用松散的断行模式，并禁止 LaTeX 自动调整多余的页面底部空白。

```
⟨*class⟩
\AtEndOfClass{%
  \sloppy
  \raggedbottom
}
```

4.7 主文档格式

4.7.1 Three matters

\cleardoublepage 空白页清空页眉页脚。

```
\sjtu@patchcmd\cleardoublepage%
  {\newpage}{\thispagestyle{empty}\newpage}
```

\chapter 每章第一页默认会设置特殊的 pagestyle, 我们将其清除。

```
\sjtu@patchcmd\chapter%
  {\thispagestyle}{\@gobble}
```

设置文档开始时初始的页码与页眉页脚风格。

```
\AtBeginDocument{%
  \pagenumbering{Alph}
  \pagestyle{empty}
}
```

\frontmatter 前言的页码设置为大写罗马数字，同时设置前言与正文的页眉页脚风格。

\mainmatter

\backmatter

```
\renewcommand\frontmatter{%
  \cleardoublepage
  \@mainmatterfalse
  \ifsjtu@style@frontmatter@numbering@false
    \sjtu@page@numberingfalse
  \fi
  \pagenumbering{Roman}
  \def\sjtu@thepage{\thepage}
  \def\sjtu@lastpageref{\lastpageref{pagesLTS.Roman}}
  \pagestyle{plain}
}
\renewcommand\mainmatter{%
  \cleardoublepage
  \@mainmattertrue
  \sjtu@page@numberingtrue
  \sjtu@set@float@fontsizetrue
  \pagenumbering{arabic}
  \def\sjtu@lastpageref{\lastpageref{pagesLTS.arabic}}
}
```

```
\renewcommand\backmatter{%
  \cleardoublepage
  \@mainmatterfalse
}
```

4.7.2 章节标题

各级标题格式设置。

```
\ctexset{%
  chapter = {%
    format       = \zihao{3}\bfseries\heiti\centering,
    nameformat   = {},
    titleformat  = {},
    aftername    = \quad,
    afterindent  = true,
    beforeskip   = {\ifsjtu@type@graduate 0pt\else 1ex\fi},
    afterskip    = {\ifsjtu@type@graduate 3ex\else 4ex\fi},
  },
  section = {%
    format       = \zihao{4}\bfseries\heiti,
    afterindent  = true,
    afterskip    = {1ex \@plus .2ex},
  },
  subsection = {%
    format       = \zihao{-4}\bfseries\heiti,
    afterindent  = true,
    afterskip    = {1ex \@plus .2ex},
  },
  subsubsection = {%
    format       = \zihao{-4}\normalfont,
    afterindent  = true,
    afterskip    = {1ex \@plus .2ex},
  },
  paragraph/afterindent    = true,
  subparagraph/afterindent = true,
}
\newlength{\sjtu@headings@indent@fixed}
\setlength{\sjtu@headings@indent@fixed}{2\ccwd}
\newcommand\sjtu@style@set@indent@headings{%
  \ifsjtu@style@indent@headings@fixed
    \sjtu@style@indent@headings@autotrue
    \gdef\sjtu@headings@indent{\sjtu@headings@indent@fixed}
  \else
    \gdef\sjtu@headings@indent{2\ccwd}
  \fi
  \ifsjtu@style@indent@headings@auto
    \ifsjtu@type@graduate\relax\else
      \ctexset{%
```

```
        subsubsection/name   = {(,)},
        subsubsection/number = \arabic{subsubsection},
      }
    \fi
  \else
    \gdef\sjtu@headings@indent{\z@}
    \ctexset{%
      subsubsection/name   = {},
      subsubsection/number = \thesubsubsection,
    }
  \fi
  \ctexset{%
    section/indent       = \sjtu@headings@indent,
    subsection/indent    = \sjtu@headings@indent,
    subsubsection/indent = \sjtu@headings@indent,
  }
}
\sjtu@style@set@indent@headings
\sjtu@option@hook{sjtu@style}{indent-headings}{%
  \sjtu@style@set@indent@headings
}
\newcommand\sjtu@indent@box{%
  \hspace*{\ifsjtu@style@indent@headings@auto 2\ccwd\else\z@\fi}%
}
⟨/class⟩
```

本科三级标题格式。

```
⟨*undergraduate⟩
\ctexset{%
  subsection/format = \zihao{-4}\normalfont,
}
⟨/undergraduate⟩
```

4.7.3 段落

全文首行缩进 2 字符，标点符号用全角。

```
⟨*class⟩
\ctexset{%
  punct          = quanjiao,
  space          = auto,
  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。

```
\setlist{nosep}
\setlist*{leftmargin=*}
\setlist[1]{labelindent=\parindent}
```

4.7.4 脚注

脚注符合中文习惯，数字带圈。

\sjtu@textcircled 生成带圈的脚注数字，最多处理到 10。

```
\def\sjtu@textcircled#1{%
  \ifnum\value{#1} >10%
    \sjtu@error{%
      Too many footnotes in this page.
      Keep footnote no more than 10%
    }%
  \fi
  {\CJKfamily+{}\symbol{\the\numexpr\value{#1}+"245F\relax}}%
}
\renewcommand{\thefootnote}{\sjtu@textcircled{footnote}}
\renewcommand{\thempfootnote}{\sjtu@textcircled{mpfootnote}}
```

定义脚注悬挂缩进（1.5 字符）。

```
\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。

```
\let\sjtu@makefnmark\@makefnmark
\def\sjtu@@makefnmark{\hbox{{\normalfont\@thefnmark}}}
\pretocmd{\@makefntext}{\let\@makefnmark\sjtu@@makefnmark}{}{}
\apptocmd{\@makefntext}{\let\@makefnmark\sjtu@makefnmark}{}{}
```

设置 url 样式，与上下文一致

```
\urlstyle{same}
```

使用 xurl 的方法，增加 URL 可断行的位置。

```
\g@addto@macro\UrlBreaks{%
  \do0\do1\do2\do3\do4\do5\do6\do7\do8\do9%
  \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J\do\K\do\L\do\M
  \do\N\do\O\do\P\do\Q\do\R\do\S\do\T\do\U\do\V\do\W\do\X\do\Y\do\Z
  \do\a\do\b\do\c\do\d\do\e\do\f\do\g\do\h\do\i\do\j\do\k\do\l\do\m
  \do\n\do\o\do\p\do\q\do\r\do\s\do\t\do\u\do\v\do\w\do\x\do\y\do\z
}
\Urlmuskip=0mu plus 0.1mu
```

\sjtu@chapter 定义一个灵活的 \sjtu@chapter 专门处理不同的需求。

\sjtu@chapter{⟨*title*⟩}[⟨*header*⟩][⟨*pdfbookmark*⟩]: 不带星号是出现在目录中的条目；title 是章标题；header 是页眉出现的标题，如果忽略则取 title。

```
\newcommand\sjtu@pdfbookmark[2]{}
\newcommand\sjtu@phantomsection{}
\NewDocumentCommand{\sjtu@chapter}{s O{#3} m O{#2}}{
  \if@openright\cleardoublepage\else\clearpage\fi%
  \IfBooleanTF{#1}{%
    \ifthenelse{\equal{#4}{}}{\relax}{%
```

```
      \sjtu@pdfbookmark{0}{#4}%
    }
  }{%
    \sjtu@phantomsection
    \addcontentsline{toc}{chapter}{#4}%
  }%%
  \chapter*{#3}%
  \@mkboth{\MakeUppercase{#2}}{\MakeUppercase{#2}}%
}
```

4.7.5 目录

章节编号深度最多 4 层, 即: x.x.x.x, 对应的命令和层序号分别是: \chapter(0), \section(1), \subsection(2), \subsubsection(3)。

```
\setcounter{secnumdepth}{3}
\setcounter{tocdepth}{2}
```

\tableofcontents
\listoffigures
\listoffigures*
\listoftables
\listoftables*

目录以及图表索引。

```
\renewcommand\tableofcontents{%
  \sjtu@chapter*{\contentsname}%
  \@starttoc{toc}%
}
\def\sjtu@listof#1{% #1: float type
  \setcounter{tocdepth}{2} % restore tocdepth in case being modified
  \@ifstar
    {\sjtu@chapter*{\csname list#1name\endcsname}\@starttoc{\csname ext@#1\endcsname}}%
    {\sjtu@chapter{\csname list#1name\endcsname}\@starttoc{\csname ext@#1\endcsname}}%
}
\renewcommand\listoffigures{\sjtu@listof{figure}}
\renewcommand\listoftables{\sjtu@listof{table}}
```

设置目录线样式。

```
\ifsjtu@language@chinese
  \renewcommand\cftdot{\textperiodcentered}
\fi
\renewcommand\cftdotsep{1}
⟨/class⟩
```

本科与研究生论文设置不同的目录格式。

```
⟨*undergraduate⟩
\renewcommand\cftchapfont{\normalfont}
\renewcommand\cftchapleader{\normalfont\cftdotfill{\cftdotsep}}
\renewcommand\cftchappagefont{\normalfont}
⟨/undergraduate⟩
⟨*graduate⟩
\renewcommand\cftchapfont{\bfseries\heiti}
\renewcommand\cftchapleader{\normalfont\cftdotfill{\cftdotsep}}
⟨/graduate⟩
```

图表索引前加下“图”，“表”关键词。

```
⟨*class⟩
\renewcommand\cftfigpresnum{\sjtu@name@figure~}
\renewcommand\cfttabpresnum{\sjtu@name@table~}
\AtEndPreamble{%
  \newlength{\sjtu@cftfignumwidth@tmp}
    \settowidth{\sjtu@cftfignumwidth@tmp}{\cftfigpresnum}
  \addtolength{\cftfignumwidth}{\sjtu@cftfignumwidth@tmp}
  \newlength{\sjtu@cfttabnumwidth@tmp}
    \settowidth{\sjtu@cfttabnumwidth@tmp}{\cfttabpresnum}
  \addtolength{\cfttabnumwidth}{\sjtu@cfttabnumwidth@tmp}
}
```

4.7.6 浮动对象以及表格

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。

```
\renewcommand\textfraction{0.15}
\renewcommand\topfraction{0.85}
\renewcommand\bottomfraction{0.65}
\renewcommand\floatpagefraction{0.60}
```

定义图、表、公式的编号格式。

```
\newcommand\sjtu@def@thefloats{
  \def\thefigure{\thechapter\sjtu@style@fl@num@sep\arabic{figure}}
  \def\p@subfigure{\thefigure}
  \def\thetable{\thechapter\sjtu@style@fl@num@sep\arabic{table}}
}
\newcommand\sjtu@counter@without@chapter{
  \counterwithout{figure}{chapter}
  \setcounter{figure}{0}
  \counterwithout{table}{chapter}
  \setcounter{table}{0}
}
\newcommand\sjtu@counter@within@chapter{
  \counterwithin*{figure}{chapter}
  \counterwithin*{table}{chapter}
  \sjtu@def@thefloats
}
\ifsjtu@continuous
  \apptocmd{\mainmatter}{%
    \sjtu@counter@without@chapter
  }{}{}
  \apptocmd{\appendix}{%
    \sjtu@counter@within@chapter
  }{}{}
\else
  \AtBeginDocument{%
```

```
    \sjtu@def@thefloats
  }
\fi
\AtBeginDocument{%
  \def\theequation{\thechapter\sjtu@style@eq@num@sep\arabic{equation}}
}
```

设置浮动体内的默认字号。

```
\newif\ifsjtu@set@float@fontsize \sjtu@set@float@fontsizefalse
\sjtu@patchcmd\@floatboxreset%
  {\normalsize}
  {\ifsjtu@set@float@fontsize\zihao{5}\else\normalsize\fi}
\NewDocumentCommand{\SJTUsetfloatfontsize}{}{\sjtu@set@float@fontsizetrue}
\NewDocumentCommand{\SJTUunsetfloatfontsize}{}{\sjtu@set@float@fontsizefalse}
```

设置双语题注。

```
\DeclareCaptionFont{sjtu@caption@font}{\zihao{5}\kaishu}
\DeclareCaptionFont{sjtu@subcaption@font}{\zihao{5}\normalfont}
\DeclareCaptionLabelSeparator{enskip}{\enskip}
\captionsetup{%
  format        = plain,
  labelformat   = simple,
  labelsep      = enskip,
  justification = centering,
  font          = sjtu@caption@font
}
\captionsetup[sub]{%
  format        = hang,
  labelformat   = brace,
  justification = justified,
  font          = sjtu@subcaption@font
}
\DeclareCaptionOption{bi-second}[]{%
  \def\tablename{\sjtu@name@table@second}
  \def\figurename{\sjtu@name@figure@second}
}
\captionsetup[bi-second]{bi-second}
```

4.7.7 数学相关

根据中文的数学排印习惯进行调整：

\ldots 省略号一律居中，所以 \ldots 不再居于底部。

```
\let\mathellipsis\cdots
```

\Re 实部、虚部操作符使用罗马体 Re、Im 而不是 fraktur 体 $\mathfrak{R}$、$\mathfrak{I}$。

\Im

```
\AtBeginDocument{%
  \renewcommand\Re{\operatorname{Re}}%
  \renewcommand\Im{\operatorname{Im}}%
```

```
}
```

\upe 提供一些方便的命令:

\upi
\upj
\dif

```
\newcommand\upe{\mathrm{e}}
\newcommand\upi{\mathrm{i}}
\newcommand\upj{\mathrm{j}}
\newcommand\dif{\mathop{}\!\mathrm{d}}
```

\bm 兼容旧的粗体命令：bm 的 \bm 和 amsmath 的 \boldsymbol。

\boldsymbol

```
\newcommand\bm{\symbf}
\renewcommand\boldsymbol{\symbf}
```

\square 兼容 amssymb 中的命令。

```
\newcommand\square{\mdlgwhtsquare}
⟨/class⟩
```

学士论文模版默认设置。

```
⟨*undergraduate⟩
\ifsjtu@type@bachelor
  \sjtusetup{
    style = {
      frontmatter-numbering = false,
      indent-headings = fixed,
    },
  }
\fi
⟨/undergraduate⟩
```

4.7.8 声明

支持扫描文件替换。

```
⟨*class⟩
\newcommand\sjtu@square{{\CJKfamily+{}\symbol{"25A1}}}
\newcommand\sjtu@copr@addon{%
  \vskip 2ex
  \begingroup
    \linespread{1}\selectfont
    本\sjtu@name@thesis@type 属于\parbox[c]{20\ccwd}{%
      {\heiti 保\hspace{1\ccwd} 密}~\sjtu@square ,
      在\uline{\hspace{2\ccwd}} 年解密后适用本授权书。\bigbreak
      {\heiti 不保密}~\sjtu@square 。
    }\par
  \endgroup
  \vskip 2ex
  （请在以上方框内打“$\checkmark$”）
}
\newcommand\sjtu@signbox[1]{%
  \parbox{.45\textwidth}{%
```

```
    #1 签名：\vskip 4em
    日期：\hspace{\stretch{3}} 年\hspace{\stretch{2}} 月\hspace{\stretch{2}} 日
  }
}
\NewDocumentCommand{\originalitypage}{s O{}}{%
  \ifsjtu@review\relax\else
    \cleardoublepage
    \ifblank{#2}{%
      \thispagestyle{empty}
      \sjtu@chapter*[\sjtu@name@orig@subtitle]{%
        \zihao{-2}\sjtu@name@school@zh\\\sjtu@name@orig@title
      }
      \IfBooleanT{#1}{%
        \let\sjtu@name@title@qouted\@empty
      }
      \begingroup
        \zihao{4}
        \begingroup
          \linespread{1.5}\selectfont
          \sjtu@name@origbody\par
        \endgroup
        \vskip 16ex
        \noindent
        \begin{minipage}{\textwidth}
          \hfill
          \sjtu@signbox{\sjtu@name@thesis@type 作者}
        \end{minipage}
        \par
      \endgroup
    }{%
      \includepdf[pagecommand={%
        \sjtu@pdfbookmark{0}{\sjtu@name@orig@subtitle}%
      }]{#2}
    }
  \fi
}
\NewDocumentCommand{\copyrightpage}{O{}}{%
  \ifsjtu@review\relax\else
    \cleardoublepage
    \ifblank{#1}{%
      \thispagestyle{empty}
      \sjtu@chapter*[\sjtu@name@copr@subtitle]{%
        \zihao{-2}\sjtu@name@school@zh\\\sjtu@name@copr@title
      }
      \begingroup
        \zihao{4}
        \begingroup
          \linespread{1.5}\selectfont
```

```
          \sjtu@name@coprbody\par
          \sjtu@copr@addon\par
        \endgroup
        \vskip 16ex
        \noindent
        \begin{minipage}{\textwidth}
          \sjtu@signbox{\sjtu@name@thesis@type 作者}
          \hfill
          \sjtu@signbox{指导教师}
        \end{minipage}
        \par
      \endgroup
    }{%
      \includepdf[pagecommand={%
        \sjtu@pdfbookmark{0}{\sjtu@name@copr@subtitle}%
      }]{#1}
    }
  \fi
}
```

4.7.9 各种环境

定义保存环境内容的命令。

```
\newcommand\sjtu@save@env@body[1]{\long\gdef\sjtu@saved@env@body{#1}}
⟨/class⟩
```

定义摘要环境，本科与研究生论文的摘要样式要求略有不同。

```
⟨*(undergraduate | graduate)⟩
\NewDocumentEnvironment{abstract}{}{%
  \sjtu@chapter*[\sjtu@name@abstract@zh]{%
    \sjtu@info@title@zh \vskip 2ex
    \begingroup
⟨undergraduate⟩      \zihao{4}
      \sjtu@name@abstract@zh
    \endgroup
  }[\sjtu@name@abstract]%
⟨graduate⟩  \zihao{4}
}{%
  \vskip 3ex \noindent
  \begingroup
⟨undergraduate⟩    \zihao{-4}
    \heiti\sjtu@name@keywords@zh
  \endgroup
  \begingroup
⟨undergraduate⟩    \zihao{5}
    \sjtu@clist@use{\sjtu@info@keywords@zh}{, }
  \endgroup
}
```

英文摘要。

```
\NewDocumentEnvironment{abstract*}{}{%
  \sjtu@chapter*[\sjtu@name@abstract@en]{%
    \MakeUppercase\sjtu@info@title@en \vskip 2ex
    \begingroup
⟨undergraduate⟩      \zihao{4}
      \MakeUppercase\sjtu@name@abstract@en
    \endgroup
  }[]
⟨graduate⟩  \zihao{4}
}{%
  \vskip 3ex \noindent
  \begingroup
⟨undergraduate⟩    \zihao{-4}\bfseries
⟨graduate⟩    \bfseries\MakeUppercase
    \sjtu@name@keywords@en
  \endgroup
  \begingroup
⟨undergraduate⟩    \zihao{5}
    \sjtu@clist@use{\sjtu@info@keywords@en}{, }
  \endgroup
}
⟨/(undergraduate | graduate)⟩
```

4.7.10 主要符号对照表

```
⟨*class⟩
\NewDocumentEnvironment{nomenclature}{}{%
  \sjtu@chapter{\sjtu@name@nomenclature}
}{}
\NewDocumentEnvironment{nomenclature*}{}{%
  \sjtu@chapter*{\sjtu@name@nomenclature}
}{}
```

4.7.11 全文总结

```
\NewDocumentEnvironment{summary}{}{%
  \sjtu@chapter{\sjtu@name@summary}
}{}
```

4.7.12 致谢

定义致谢环境，盲审模式下隐藏致谢。

```
\NewDocumentEnvironment{acknowledgements}{}{%
  \Collect@Body\sjtu@save@env@body
}{%
  \ifsjtu@review\relax\else
    \sjtu@chapter{\sjtu@name@acknowledgements}
    \sjtu@saved@env@body
```

```
  \fi
}
```

4.7.13 附录

定义附录使用的列表环境，使用和参考文献列表相同的样式。

```
\newenvironment{sjtu@bibliolist}[2]{%
  \sjtu@chapter{#2}
  \list{\@biblabel{\@arabic\c@enumiv}}%
       {\settowidth\labelwidth{\@biblabel{#1}}%
        \leftmargin\labelwidth
        \advance\leftmargin\labelsep
        \@openbib@code
        \usecounter{enumiv}%
        \let\p@enumiv\@empty
        \renewcommand\theenumiv{\@arabic\c@enumiv}}%
  \sloppy
  \clubpenalty4000
  \@clubpenalty \clubpenalty
  \widowpenalty4000%
  \sfcode`\.\@m
}{%
  \def\@noitemerr
    {\@latex@warning{Empty `bibliolist' environment}}%
  \endlist
}
```

分别学术论文、科研成果两个附录环境。

```
\NewDocumentEnvironment{publications}{O{99}}{%
  \Collect@Body\sjtu@save@env@body
}{%
  \ifsjtu@review\relax\else
    \begin{sjtu@bibliolist}{#1}{\sjtu@name@publications}
      \sjtu@saved@env@body
    \end{sjtu@bibliolist}
  \fi
}
\NewDocumentEnvironment{publications*}{O{99}}{%
  \Collect@Body\sjtu@save@env@body
}{%
  \ifsjtu@review
    \begin{sjtu@bibliolist}{#1}{\sjtu@name@publications}
      \sjtu@saved@env@body
    \end{sjtu@bibliolist}
  \fi
}
\NewDocumentEnvironment{achievements}{O{99}}{%
  \Collect@Body\sjtu@save@env@body
```

```
}{%
  \ifsjtu@review\relax\else
    \begin{sjtu@bibliolist}{#1}{\sjtu@name@achievements}
      \sjtu@saved@env@body
    \end{sjtu@bibliolist}
  \fi
}
\NewDocumentEnvironment{achievements*}{O{99}}{%
  \Collect@Body\sjtu@save@env@body
}{%
  \ifsjtu@review
    \begin{sjtu@bibliolist}{#1}{\sjtu@name@achievements}
      \sjtu@saved@env@body
    \end{sjtu@bibliolist}
  \fi
}
```

定义简历环境。

```
\NewDocumentEnvironment{resume}{}{%
  \Collect@Body\sjtu@save@env@body
}{%
  \ifsjtu@review\relax\else
    \sjtu@chapter{\sjtu@name@resume}
    \sjtu@saved@env@body
  \fi
}
```

本科论文英文大摘要。

```
\NewDocumentEnvironment{digest}{}{%
  \Collect@Body\sjtu@save@env@body
}{%
  \ifsjtu@type@bachelor
    \ifsjtu@language@chinese
      \AtEndDocument{%
        \cleardoublepage
        \pagenumbering{roman}
        \def\sjtu@thepage{\theCurrentPageLocal}
        \def\sjtu@lastpageref{\lastpageref{pagesLTS.roman.local}}
        \sjtu@chapter*[\sjtu@name@digest]{\MakeUppercase\sjtu@info@title@en}
        \counterwithout{section}{chapter}
        \sjtu@counter@without@chapter
        \let\addcontentsline\@gobblethree
        \sjtu@saved@env@body
      }
    \fi
  \fi
}
```

4.7.14 盲审模式

盲审模式下隐藏作者、导师姓名等信息。

```
\AtEndPreamble{
  \ifsjtu@review%
    \sjtusetup{%
      info = {
        author          = {},
        author*         = {},
        id              = {},
        supervisor      = {},
        supervisor*     = {},
        assisupervisor  = {},
        assisupervisor* = {},
      }
    }
  \fi
}
```

\encrypt 定义盲审模式工具宏\encrypt:

```
\NewDocumentCommand{\encrypt}{m O{***}}{%
  \ifsjtu@review
    {#2}
  \else
    {#1}
  \fi
}
```

4.7.15 封面

定义一个特殊的下划线命令供绘制本科论文封面时使用。

```
\newcommand\sjtu@uline[1]{%
  \begingroup
    \setbox0=\vbox{\strut #1\strut}%
    \dimen0=0pt
    \loop\ifdim\ht0>0pt
      \dimen1=\dimexpr\ht0 - \baselineskip\relax
      \setbox1=\vsplit0 to \ht\strutbox
      \advance\dimen1 by -\ht0
      \noindent\raisebox{-\dimen0}[\ht\strutbox][\dp\strutbox]{\box1}%
      \advance\dimen0 by \dimen1
      \vspace{-0.2ex}\hrule\vskip 0.2ex
    \repeat
  \endgroup
}
⟨/class⟩
```

绘制封面

```
⟨*(undergraduate j graduate)⟩
\RenewDocumentCommand{\maketitle}{}{%
  \sjtu@pdfbookmark{0}{\sjtu@name@titlepage}
  \sjtu@make@titlepage@zh%
⟨graduate⟩  \sjtu@make@titlepage@en%
}
\newcommand\sjtu@make@titlepage@zh{%
  \cleardoublepage
⟨*undergraduate⟩
  \thispagestyle{empty}
  \begin{center}
    \kaishu
    \vspace*{48pt}
    \begingroup
      \includegraphics[height=96pt]%
        {sjtu-vi-name-\sjtu@style@title@logo@color.pdf}
      \par
    \endgroup
    {\fontsize{32}{42}\selectfont\sjtu@name@subject@zh\par}
    \vskip 6pt
    {\zihao{-2}\MakeUppercase\sjtu@name@subject@en\par}
    \vskip 16pt
    \begingroup
      \includegraphics[height=86pt]%
        {sjtu-vi-badge-\sjtu@style@title@logo@color.pdf}
      \par
    \endgroup
    \vskip \stretch{2}
    \begingroup
      \zihao{2}
      \begin{tabular}{r@{：}l}
        论文题目 &
        \parbox[t]{280pt}{\centering\zihao{-2}\sjtu@uline\sjtu@info@title@zh}
      \end{tabular}
      \par
    \endgroup
    \vskip \stretch{1}
    \begingroup
      \zihao{3}
      \begin{tabular}
        {>{\begin{CJKfilltwosides}{4.2\ccwd}}r<{\end{CJKfilltwosides}}@{：}c}
        \sjtu@name@author@zh      & \sjtu@info@author@zh      \\\cline{2-2}
        \sjtu@name@id@zh          & \makebox[180pt]{\sjtu@info@id} \\\cline{2-2}
        \ifsjtu@type@course
          \sjtu@name@course@zh    & \sjtu@info@course@zh      \\\cline{2-2}
        \else
          \sjtu@name@major@zh     & \sjtu@info@major@zh       \\\cline{2-2}
        \fi
```

```
        \sjtu@name@supervisor@zh  & \sjtu@info@supervisor@zh  \\\cline{2-2}
        \sjtu@name@department@zh  & \sjtu@info@department@zh  \\\cline{2-2}
      \end{tabular}
      \par
    \endgroup
    \vskip 32pt
⟨/undergraduate⟩
⟨*graduate⟩
  \def\sjtu@info@fund{\zihao{-5}\sjtu@clist@use{\sjtu@info@fund@zh}{\par}}
  \thispagestyle{title}
  \begin{center}
    \vspace*{28pt}
    {\zihao{-2}\sjtu@name@subject@zh\par}
    \vskip \stretch{4}
    {\zihao{2}\heiti\sjtu@info@title@zh\par}
    \vskip \stretch{5}
    \begingroup
      \zihao{4}
      \def\arraystretch{1.25}
      \begin{tabular}
        {>{\begin{CJKfilltwosides}[t]{6.5\ccwd}\heiti}r<{\end{CJKfilltwosides}}
          @{: }l}
        \sjtu@name@author@zh           & \sjtu@info@author@zh         \\
        \sjtu@name@id@zh               & \sjtu@info@id               \\
        \sjtu@name@supervisor@zh       & \sjtu@info@supervisor@zh     \\
        \ifx\sjtu@info@assisupervisor@zh\@empty\else
          \sjtu@name@assisupervisor@zh & \sjtu@info@assisupervisor@zh \\
        \fi
        \sjtu@name@degree@zh           & \sjtu@info@degree@zh         \\
        \sjtu@name@major@zh            & \sjtu@info@major@zh          \\
        \sjtu@name@department@zh       & \sjtu@info@department@zh     \\
        \sjtu@name@defenddate@zh       &
          \sjtu@date{\sjtu@date@format@zh}{\sjtu@info@date}          \\
        \sjtu@name@conferring@zh       & \sjtu@name@school@zh         \\
      \end{tabular}
      \par
    \endgroup
    \vskip 26pt
⟨/graduate⟩
  \end{center}
}
⟨*graduate⟩
\newcommand\sjtu@make@titlepage@en{%
  \cleardoublepage
  \def\sjtu@info@fund{\zihao{-5}\sjtu@clist@use{\sjtu@info@fund@en}{\par}}
  \thispagestyle{title}
  \begin{center}
    \vspace*{28pt}
```

```
    {\zihao{-2}\sjtu@name@subject@en\par}
    \vskip \stretch{4}
    {\zihao{2}\bfseries\MakeUppercase\sjtu@info@title@en\par}
    \vskip \stretch{5}
    \begingroup
      \zihao{4}
      \def\arraystretch{1.25}
      \begin{tabular}
        {>{\bfseries}l<{:~}p{.45\textwidth}}
        \sjtu@name@author@en           & \sjtu@info@author@en         \\
        \sjtu@name@id@en               & \sjtu@info@id                \\
        \sjtu@name@supervisor@en       & \sjtu@info@supervisor@en     \\
        \ifx\sjtu@info@assisupervisor@en\@empty\else
          \sjtu@name@assisupervisor@en & \sjtu@info@assisupervisor@en \\
        \fi
        \sjtu@name@degree@en           & \sjtu@info@degree@en         \\
        \sjtu@name@major@en            & \sjtu@info@major@en          \\
        \sjtu@name@department@en       & \sjtu@info@department@en     \\
        \sjtu@name@defenddate@en       &
          \sjtu@date{\sjtu@date@format@en}{\sjtu@info@date}          \\
        \sjtu@name@conferring@en       & \sjtu@name@school@en         \\
      \end{tabular}
      \par
    \endgroup
    \vskip 26pt
  \end{center}
}
⟨/graduate⟩
⟨/(undergraduate j graduate)⟩
```

4.8 其他宏包的设置

这些宏包并非格式要求，但是为了方便同学们使用，在这里进行简单设置。

4.8.1 hyperref 宏包

```
⟨*class⟩
\AtEndOfPackageFile*{hyperref}{
  \hypersetup{
    linktoc            = all,
    bookmarksdepth     = 2,
    bookmarksnumbered  = true,
    bookmarksopen      = true,
    bookmarksopenlevel = 1,
    unicode            = true,
    psdextra           = true,
    breaklinks         = true,
    plainpages         = false,
```

```
    pdfdisplaydoctitle = true,
    hidelinks,
  }
  \newcounter{sjtu@bookmark}
  \renewcommand\sjtu@pdfbookmark[2]{%
    \phantomsection
    \stepcounter{sjtu@bookmark}%
    \pdfbookmark[#1]{#2}{sjtuchapter.\thesjtu@bookmark}%
  }
  \renewcommand\sjtu@phantomsection{%
    \phantomsection
  }
  \pdfstringdefDisableCommands{%
    \let\\\@empty
    \let\quad\@empty
    \let\hspace\@gobble
  }
```

hyperref 与 unicode-math 存在一些兼容性问题，见 ustctug/ustcthesis#223，hotex/hyperref#90 和 ustctug/ustcthesis/#235。

```
  \@ifpackagelater{hyperref}{2019/04/27}{}{%
    \g@addto@macro\psdmapshortnames{\let\mu\textmu}
  }%
  \AtBeginDocument{%
    \hypersetup{
      pdftitle    = \sjtu@info@title,
      pdfsubject  = \sjtu@name@subject,
      pdfkeywords = \sjtu@info@keywords,
      pdfauthor   = \sjtu@info@author,
      pdfcreator  = {LaTeX with SJTUThesis \version}
    }
  }%
}
```

4.8.2 threeparttable 宏包

```
\AtEndOfPackageFile*{threeparttable}{
  \appto\TPTnoteSettings{\footnotesize}
}
```

4.8.3 longtable 宏包

```
\AtEndOfPackageFile*{longtable}{
  \BeforeBeginEnvironment{longtable}
    {\begingroup\ifsjtu@set@float@fontsize\zihao{5}\fi}
  \AfterEndEnvironment{longtable}
    {\endgroup}
}
```

4.8.4 siunitx 宏包

```
\AtEndOfPackageFile*{siunitx}{
  \sisetup{
    group-minimum-digits = 4,
    separate-uncertainty = true,
    inter-unit-product   = \ensuremath{{}\cdot{}},
  }
  \ifsjtu@language@chinese
    \sisetup{
      list-final-separator = { 和 },
      list-pair-separator  = { 和 },
      range-phrase         = {～},
    }
  \fi
}
```

4.8.5 ntheorem 宏包和 amsthm 宏包

```
\newcommand\sjtu@def@theorem@name{%
  \ifsjtu@language@chinese
    \sjtu@name@def{assumption}{假设}
    \sjtu@name@def{axiom}{公理}
    \sjtu@name@def{conjecture}{猜想}
    \sjtu@name@def{corollary}{推论}
    \sjtu@name@def{definition}{定义}
    \sjtu@name@def{example}{例}
    \sjtu@name@def{exercise}{练习}
    \sjtu@name@def{lemma}{引理}
    \sjtu@name@def{problem}{问题}
    \sjtu@name@def{proof}{证明}
    \sjtu@name@def{proposition}{命题}
    \sjtu@name@def{remark}{注}
    \sjtu@name@def{solution}{解}
    \sjtu@name@def{theorem}{定理}
  \else
    \sjtu@name@def{assumption}{Assumption}
    \sjtu@name@def{axiom}{Axiom}
    \sjtu@name@def{conjecture}{Conjecture}
    \sjtu@name@def{corollary}{Corollary}
    \sjtu@name@def{definition}{Definition}
    \sjtu@name@def{example}{Example}
    \sjtu@name@def{exercise}{Exercise}
    \sjtu@name@def{lemma}{Lemma}
    \sjtu@name@def{problem}{Problem}
    \sjtu@name@def{proof}{Proof}
    \sjtu@name@def{proposition}{Proposition}
    \sjtu@name@def{remark}{Remark}
    \sjtu@name@def{solution}{Solution}
    \sjtu@name@def{theorem}{Theorem}
  \fi
```

```
}
\newcommand\sjtu@def@theorem{%
  \newtheorem{assumption} {\sjtu@name@assumption} [chapter]
  \newtheorem{axiom}      {\sjtu@name@axiom}      [chapter]
  \newtheorem{conjecture} {\sjtu@name@conjecture} [chapter]
  \newtheorem{corollary}  {\sjtu@name@corollary}  [chapter]
  \newtheorem{definition} {\sjtu@name@definition} [chapter]
  \newtheorem{example}    {\sjtu@name@example}    [chapter]
  \newtheorem{exercise}   {\sjtu@name@exercise}   [chapter]
  \newtheorem{lemma}      {\sjtu@name@lemma}      [chapter]
  \newtheorem{problem}    {\sjtu@name@problem}    [chapter]
  \newtheorem{proposition}{\sjtu@name@proposition}[chapter]
  \newtheorem{theorem}    {\sjtu@name@theorem}    [chapter]
  \newtheorem*{remark}    {\sjtu@name@remark}
  \newtheorem*{solution}  {\sjtu@name@solution}
}
```

ntheorem 宏包

```
\PassOptionsToPackage{amsmath,thmmarks,hyperref}{ntheorem}
\AtEndOfPackageFile*{ntheorem}{
  \sjtu@def@theorem@name
  \theoremheaderfont{\sjtu@indent@box\bfseries\heiti}
  \theorembodyfont{\normalfont}
  \theoremseparator{\enskip}
  \theoremsymbol{\ensuremath{\square}}
  \newtheorem*{proof}{\sjtu@name@proof}
  \theoremstyle{plain}
  \theoremsymbol{}
  \sjtu@def@theorem
}
```

amsthm 宏包

```
\AtEndOfPackageFile*{amsthm}{
  \sjtu@def@theorem@name
  \let\sjtu@thmhead\thmhead@plain
  \def\thmhead@plain{\sjtu@indent@box\sjtu@thmhead}
  \newtheoremstyle{sjtuplain}
    {}{}
    {\normalfont}{}
    {\bfseries\heiti}{}
    {\ccwd}{}
  \theoremstyle{sjtuplain}
  \sjtu@def@theorem
  \renewcommand\proofname\sjtu@name@proof
  \renewenvironment{proof}[1][\proofname]{\par
    \pushQED{\qed}%
    \normalfont \topsep6\p@\@plus6\p@\relax
    \trivlist
    \item\relax
```

```
      {\sjtu@indent@box\bfseries\heiti #1~}
      \hspace\labelsep\ignorespaces
  }{%
    \popQED\endtrivlist\@endpefalse
  }
}
```

4.8.6 algorithm2e 宏包

```
\PassOptionsToPackage{algochapter}{algorithm2e}
\AtEndOfPackageFile*{algorithm2e}{
  \SetAlgorithmName{\sjtu@name@algorithm}%
                   {\sjtu@name@algorithm}%
                   {\sjtu@name@listalgorithm}
  \SetAlgoCaptionSeparator{~}
  \def\listalgocfname{\listalgorithmcfname}
  \newlistof{alg}{loa}{\listalgocfname}
  \let\l@algocf\l@alg
  \setlength{\cftalgindent}{1.5em}
  \setlength{\cftalgnumwidth}{2.3em}
  \renewcommand\cftalgpresnum{\sjtu@name@algorithm~}
  \apptocmd{\sjtu@counter@without@chapter}{%
    \counterwithout{algocf}{chapter}
    \setcounter{algocf}{0}
  }{}{}
  \pretocmd{\sjtu@counter@within@chapter}{%
    \counterwithin*{algocf}{chapter}
  }{}{}
  \apptocmd{\sjtu@def@thefloats}{%
    \def\thealgocf{\thechapter\sjtu@style@fl@num@sep\arabic{algocf}}
  }{}{}
  \sjtu@patchcmd\algocf@latexcaption%
    {\addcontentsline}
    {\caption@iflist{\addcontentsline}{\@gobblethree}}
  \AtEndPreamble{%
    \newlength{\sjtu@cftalgnumwidth@tmp}
      \settowidth{\sjtu@cftalgnumwidth@tmp}{\cftalgpresnum}
    \addtolength{\cftalgnumwidth}{\sjtu@cftalgnumwidth@tmp}
  }
  \renewcommand\listofalgorithms{\sjtu@listof{algocf}}
}
```

4.8.7 algorithm 宏包

```
\AtEndOfPackageFile*{algorithm}{
  \RequirePackage{algorithmicx, algpseudocode}
  \floatname{algorithm}{\sjtu@name@algorithm}
  \@addtoreset{algorithm}{chapter}
  \sjtu@patchcmd\@chapter%
    {\if@twocolumn}
```

```
    {\addtocontents{loa}{\protect\addvspace{10\p@}}%
     \if@twocolumn}
  \def\listalgorithmname{\sjtu@name@listalgorithm}
  \newlistof{alg}{loa}{\listalgorithmname}
  \let\l@algorithm\l@alg
  \setlength{\cftalgindent}{1.5em}
  \setlength{\cftalgnumwidth}{2.3em}
  \renewcommand\cftalgpresnum{\sjtu@name@algorithm~}
  \apptocmd{\sjtu@counter@without@chapter}{%
    \counterwithout{algorithm}{chapter}
    \setcounter{algorithm}{0}
  }{}{}
  \pretocmd{\sjtu@counter@within@chapter}{%
    \counterwithin*{algorithm}{chapter}
  }{}{}
  \apptocmd{\sjtu@def@thefloats}{%
    \def\thealgorithm{\thechapter\sjtu@style@fl@num@sep\arabic{algorithm}}
  }{}{}
  \AtEndPreamble{%
    \newlength{\sjtu@cftalgnumwidth@tmp}
      \settowidth{\sjtu@cftalgnumwidth@tmp}{\cftalgpresnum}
    \addtolength{\cftalgnumwidth}{\sjtu@cftalgnumwidth@tmp}
  }
  \renewcommand\listofalgorithms{\sjtu@listof{algorithm}}
}
```

4.8.8 listings 宏包

```
\AtEndOfPackageFile*{listings}{
  \lstdefinestyle{lstStyleCode}{
    aboveskip=\medskipamount,
    belowskip=\medskipamount,
    basicstyle=\footnotesize\ttfamily,
    commentstyle=\slshape\color{black!60},
    stringstyle=\color{green!40!black!100},
    keywordstyle=\bfseries\color{blue!50!black},
    extendedchars=false,
    upquote=true,
    tabsize=2,
    showstringspaces=false,
    xleftmargin=1em,
    xrightmargin=1em,
    breaklines=true,
    breakindent=2em,
    framexleftmargin=1em,
    framexrightmargin=1em,
    backgroundcolor=\color{gray!10},
    columns=flexible,
    keepspaces=true,
```

```
    texcl=true,
    mathescape=true
  }
}
```

4.8.9 tikz 宏包

```
\AtEndOfPackageFile*{tikz}{
  \usetikzlibrary{shapes.geometric, arrows}
  \tikzstyle{startstop} = [
    rectangle,
    rounded corners,
    minimum width=2cm,
    minimum height=1cm,
    text centered,
    draw=black
  ]
  \tikzstyle{io} = [
    trapezium,
    trapezium left angle=75,
    trapezium right angle=105,
    minimum width=1cm,
    minimum height=1cm,
    text centered,
    draw=black
  ]
  \tikzstyle{process} = [
    rectangle,
    minimum width=2cm,
    minimum height=1cm,
    text centered,
    draw=black
  ]
  \tikzstyle{decision} = [
    diamond,
    minimum width=2cm,
    minimum height=1cm,
    text centered,
    draw=black]
  \tikzstyle{arrow} = [thick, ->, ≥stealth]
}
⟨/class⟩
```

版本历史

v0.1a

General: 上海交通大学硕士学位论文 LaTeX 模板发布。. 1

v0.1b

General: 完善了模板使用说明，增加了定理环境、并列子图、三线表格的例子。. . . . 1

v0.1c

General: 增加了 Linux 下使用 ctex 宏包的注意事项、bib 条目的规范要求，修正了 ctexbook 与 listings 共同使用时的断页错误。. 1

v0.2a

General: 模板由 CASthesis 改名为 sjtumaster。在 diss.tex 中可以方便地改变正文字号、切换但双面打印。增加了不编号的一章“全文总结”。添加了可伸缩符号（等号、箭头）的例子，增加了长标题换行的例子。1

v0.3a

General: 移植到 XeLaTeX/LaTeX 上。. 1

v0.4

General: 包含交大学士、硕士、博士学位论文模板。模板在 GitHub 上管理和更新。. 1

v0.5

General: 修改说明文件的措辞，更正 Makefile 文件，使用 metalog 宏包替换 xltxtra 宏包，使用 mathtools 宏包替换 amsmath 宏包，移除了所有 CJKtilde 符号。1

v0.5.1

General: 在 LaTeX 命令和中文字符之间留了空格，在 Makefile 中增加 release 功能。. 1

v0.5.2

General: 更正拼写错误。在 diss.tex 加入 ack.tex。. 1

v0.5.3

General: 更正 subsubsection 格式错误，这个错误导致如“1.1 小结”这样的标题没有被正确加粗。. 1

v0.6

General: 学士、硕士、博士学位论文模板合并在了一起。. 1

v0.6.5

General: 修正一些小问题，缩减 git 仓库体积，仓库由 sjtu-thesis-template-latex 更名为 SJTUThesis。. 1

v0.7

General: 增加盲审选项，调用外部工具插入扫描件。. 1

v0.8

General: 使用 biber/biblatex 组合替代 BibTeX，带来更强大稳定的参考文献处理能力；添加 enumitem 宏包增强列表环境控制能力；完善宏包文字描述。. 1

v0.9

General: 适配 ctex 2.x 宏包，需要使用 TeXLive 2015 编译。. 1

v0.9.4

General: 增加算法和流程图。. 1

v0.9.5

General: 改用 GB/7714-2015 参考文献风格。. 1

v0.10

General: 项目转移至 SJTUG 名下，并增加了英文模版，修改了默认字体设置。. 1

命令索引

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

Symbols

\. 1295
\@addtoreset 1709
\@arabic 1283, 1290
\@biblabel 1283, 1284
\@chapter 1710
\@clubpenalty 1293
\@empty 47, 57, 60, 70, 281, 286, 482, 484, 504, 506, 1164, 1289, 1474, 1509, 1551, 1552
\@endpefalse 1671
\@floatboxreset 1085
\@gobble 863, 1553
\@gobblethree 1358, 1698
\@height 844, 846
\@ifpackagelater 1555
\@ifstar 1018
\@ifundefined 36
\@latex@warning 1298
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\@mainmatterfalse 870, 889
\@mainmattertrue 881
\@makefnmark 982, 984, 985
\@makefntext 984, 985
\@mkboth 1008
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\@nameuse 37, 39, 41, 42, 55, 63, 65, 69, 70, 71, 73, 74, 75, 76, 764
\@nil 307, 310
\@noitemerr 1297
\@openbib@code 1287
\@starttoc . . . 1014, 1019, 1020
\@thefnmark 983
\@width 844, 846

A

\abstract *9*
\abstract* *9*
\achievements *10*
\achievements* *10*
\acknowledgements *10*
\addcontentsline 1005, 1358, 1697, 1698
\addtocontents 1712
\addvspace 1712
\advance 1286, 1393, 1395
\AfterEndEnvironment 1574
\algocf@latexcaption 1696
\appendix *10*, 1073
\appto 1569
\apptocmd . . 985, 1070, 1073, 1686, 1693, 1720, 1727
\arabic 932, 1054, 1056, 1082, 1694, 1728
\arraystretch 1467, 1503
\assisupervisor *7*
\assisupervisor* *7*
\AtBeginDocument 864, 1077, 1081, 1112, 1558
\AtBeginOfPackageFile 179
\AtEndDocument 1350
\AtEndOfClass 145, 856
\AtEndOfPackageFile 1527, 1568, 1571, 1577, 1640, 1651, 1675, 1706, 1737, 1762
\AtEndPreamble 1041, 1364, 1699, 1730
\author *7*
\author* *7*

B

\backmatter *10*, 868
\baselineskip 1391
\BeforeBeginEnvironment . . . 1572
\bigbreak 1142
\bm 1120
\boldsymbol 1120
\bottomfraction 1051
\box 1394

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\c@enumiv 1283, 1290
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\captionsetup . 1093, 1100, 1110
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\cftalgindent 1683, 1717
\cftalgnumwidth 1684, 1702, 1718, 1733
\cftalgpresnum 1685, 1701, 1719, 1732
\cftchapfont 1030, 1035
\cftchapleader 1031, 1036
\cftchappagefont 1032
\cftdot 1025
\cftdotfill 1031, 1036
\cftdotsep . . . 1027, 1031, 1036
\cftfignumwidth 1044
\cftfigpresnum 1039, 1043
\cfttabnumwidth 1047
\cfttabpresnum 1040, 1046
\chapter 862, 1007
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\chinese 458
\CJKfamily 977, 1135
\ClassError 3
\ClassWarning 6
\cleardoublepage . . 860, 869, 880, 888, 998, 1157, 1189, 1351, 1408, 1492
\clearpage 998
\cline 1442, 1443, 1445, 1447, 1449, 1450
\clubpenalty 1292, 1293
\Collect@Body 1274, 1302, 1311, 1320, 1329, 1338, 1346
\color . . 1742, 1743, 1744, 1755
\comma@parse 293
\contentsname 1013
\continuous *5*
\copyrightpage *8*, 1187

\counterwithin 1065, 1066, 1691, 1725
\counterwithout 1059, 1061, 1356, 1687, 1721
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\course* 7
\ctexset 456, 472, 891, 930, 937, 942, 957, 962

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\day 277
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\DeclareCaptionFont . 1090, 1091
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\DeclareCaptionOption 1106
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\degree* 7
\department 7
\department* 7
\dif 1116
\digest 10
\dimen 1389, 1391, 1393, 1394, 1395
\dimexpr 1391
\do 988, 989, 990, 991, 992
\dp 1394

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\encrypt 1379
\endlist 1299
\endtrivlist 1671
\enskip 1092, 1644
\ensuremath 1581, 1645
\equal 1000
\equation-number-separator . . . 7

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\fancyfoot 811, 837
\fancyhead 820, 822, 823, 827, 831
\fancyhf 810, 817
\fancypagestyle 809, 816
\figurename 1108
\float-number-separator 6
\floatname 1708
\floatpagefraction 1052
\fontset 5
\fontsize 1419
\footnote 9
\footnotemargin 981
\footnotesize 1569, 1741
\footrulewidth 813
\frontmatter 9, 868
\frontmatter-numbering 6
\fund 7
\fund* 7

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\g@addto@macro . 64, 81, 987, 1556
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\hbox 983
\header 6
\header-logo-color 6
\headrule 843
\headrulewidth 812, 851
\headwidth 844, 846
\heiti 833, 893, 902, 907, 1035, 1141, 1143, 1234, 1463, 1469, 1642, 1658, 1668
\hrule 844, 846, 1396
\ht 1390, 1391, 1392, 1393, 1394
\hypersetup 1528, 1559

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\if@openright 998
\if@twocolumn 1711, 1713
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\IfBooleanTF 999
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\ifsjtu@continuous 1069
\ifsjtu@language@chinese 295, 433, 801, 1024, 1349, 1583, 1592
\ifsjtu@page@numbering 794, 838
\ifsjtu@review 305, 811, 1156, 1188, 1276, 1304, 1313, 1322, 1331, 1340, 1365, 1380
\ifsjtu@set@float@fontsize 1084, 1087, 1573
\ifsjtu@style@frontmatter@numbering@false 871
\ifsjtu@style@header@single . 819
\ifsjtu@style@indent@headings@auto 928, 953
\ifsjtu@style@indent@headings@fixed 922
\ifsjtu@type@bachelor 1125, 1348
\ifsjtu@type@course . . 386, 1444
\ifsjtu@type@doctor . . 129, 351
\ifsjtu@type@graduate . . 127, 136, 146, 350, 898, 899, 929
\ifsjtu@type@master 132
\ifsjtu@zihao@auto 135
\ifthenelse 1000
\ignorespaces 1669
\Im 1112
\includegraphics 828, 1415, 1424
\includepdf 1181, 1212
\includepdfset 174
\indent-headings 6
\info 7
\input 147, 149
\item 1667

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\keywords* 7
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\kvsetkeys 14, 16, 19, 54, 196, 251, 322
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\l@alg 1682, 1716
\l@algocf 1682
\l@algorithm 1716
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\labelwidth 1284, 1285
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\latinfontset 5
\ldots 1111
\leftmargin 1285, 1286
\leftmark 823
\linespread . . . 1139, 1169, 1198
\list 1283

\listalgocfname 1680, 1681
\listalgorithmcfname 1680
\listalgorithmname .. 1714, 1715
\listofalgorithms . 9, 1704, 1735
\listofalgorithms* 9
\listoffigures 9, 1012
\listoffigures* 9, 1012
\listoftables 9, 1012
\listoftables* 9, 1012
\loop 1390
\lstdefinestyle 1738

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\mainmatter 9, 868, 1070
\major 7
\major* 7
\makebox 1443
\maketitle 8, 1402
\MakeUppercase .....
833, 1008, 1243, 1246,
1254, 1355, 1421, 1499
\mathellipsis 1111
\mathop 1119
\mathrm . 1116, 1117, 1118, 1119
\mdlgwhtsquare 1122
\medskipamount 1739, 1740
\month 277
\mu 1556

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\NewDocumentCommand 997, 1088,
1089, 1155, 1187, 1379
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