

SJTUT_EX: 上海交通大学文档类集

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文档类集, 包括学位论文文档类 `sjuthesis` 以及普通文档类 `sjuarticle` 和 `sjtureport`。

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第 1 节 介绍

最早的一版 L^AT_EX 学位论文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-L^AT_EX 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 L^AT_EX 学位论文模板。由于 CJK-L^AT_EX 方案不易使用, weijianwen 与 William Wang 开始着手把模板向 X_YL^AT_EX 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。

*[sjtut_Ex rev. b468d42](#).

2012 年 5 月模板开始在 GitHub¹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 DocTeX 文档和 DocSTRIP 工具进行代码的管理, 升级版本号为 1.0。2022 年 11 月, 论文模板改版后, 使用 L^AT_EX3 重构了代码, 添加 sjturement 和 sjtuarticle 文档类, 升级版本号为 2.0。

现在, SJTUTE_X 代码在 GitHub²上维护。原 SJTUThesis 仓库则作为学位论文示例文档, 提供开箱即用的模板。学位论文模板用户可以在 Discussions 上提问使用问题, 也可以在 Issues 中进行 Bug 反馈与新功能提案。如果需要对文档类代码进行修改, 欢迎前往 SJTUTE_X 仓库进行 Pull Request。SJTUTE_X 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!

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 SJTUTE_X 也难以保证输出的论文符合学校规范。

第 2 节 简明教程

2.1 安装 T_EX 发行版

因为 L^AT_EX3 和相关宏包在不断更新, 所以推荐使用最新的 T_EX 发行版。SJTUTE_X 支持主流的 T_EX 发行版, 包括 T_EX Live、MiK_TE_X、MacT_EX, 但不支持 C_TE_X 套装。安装方法具体可以参考 Wiki 页面《T_EX 发行版及其安装》。

SJTUTE_X 最低支持至 2021 年发行的 T_EX 发行版, ctex 宏包版本应当在 v2.5 及以上。版本过低将无法正常编译。

2.2 文件组成

表 1 列出了 SJTUTE_X 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	学位论文文档类
	sjureport.cls	报告文档类
	sjuarticle.cls	文稿文档类
	sjtu-name-*.def	文档类名称配置
	sjtu-lang-*.def	文档类语言配置
	sjtu-scheme-*.def	文档类语言方案
字体配置文件	sjtu-text-font-*.def	西文字体配置
	sjtu-math-font-*.def	数学字体配置
	sjtu-cjk-font-*.def	CJK 字体配置
视觉形象系统 ^a	sjtu-vi-logo-*.pdf	校标图片
	sjtu-vi-badge-*.pdf	校徽图片
	sjtu-vi-name-*.pdf	校名图片

^a 交大视觉形象系统的相关图像资源版权归上海交通大学所有。

¹<https://github.com/weijianwen/SJTUThesis>, 项目转移后该链接已重定向。

²<https://github.com/sjtug/SJTUTE_X>

2.3 使用文档类

共有 3 种文档类, `sjtuthesis` 用于学位论文的排版, `sjtreport` 用于课程大报告的排版, `sjtarticle` 用于课程小论文的排版。

将文档保存在下载好的 SJTUT_EX 模板根目录下, 文件以 `.tex` 后缀结尾。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。对于不同的文档类, 使用方法略有不同, 这里给出这三种文档类的最小使用示例。

下面这份 T_EX 文档展示了 `sjtuthesis` 文档类的基本用法, 一般需要指定中英文名称。该文档将包含中英文封面, 页眉为文档主题及章节名称。

```
\documentclass[type=master]{sjtuthesis}
\sjtsetup{
  info = {
    zh/title = {上海交通大学学位论文模板示例文档},
    en/title = {A Sample Document for SJTU Thesis Template},
    zh/author = {某某},
    en/author = {Mo Mo},
  }
}
\begin{document}
  \maketitle
  \frontmatter
  \tableofcontents*
  \mainmatter
  \chapter{欢迎}
  \section{欢迎使用 SJTUThesis}
  你好, \LaTeX{}!
\end{document}
```

下面这份 T_EX 文档展示了 `sjtreport` 文档类的基本用法, 建议使用标准命令定义中文名称。该文档将包含标题页, 页眉为校标图片、文档主题及章节名称。

```
\documentclass{sjtreport}
\title{上海交通大学报告模板示例文档}
\author{某某}
\subject{XX期末课程论文}
\keywords{上海交大, 饮水思源, 爱国荣校}
\begin{document}
  \maketitle
  \chapter{欢迎}
  \section{欢迎使用 SJTUReport}
  你好, \LaTeX{}!
\end{document}
```

下面这份 T_EX 文档展示了 `sjtarticle` 文档类的基本用法, 建议使用标准命令定义中文名称, 不能够使用 `\chapter` 这一级。该文档包含标题栏, 页眉为校标图片、文档主题及章节名称。

```
\documentclass{sjtarticle}
\title{示例文档}
\author{某某}
\begin{document}
  \maketitle
  \section{欢迎使用 SJTUArticle}
  你好, \LaTeX{}!
\end{document}
```

2.4 编译文档

文档类推荐使用 XeLaTeX 或 LuaLaTeX 编译,同时也支持 pdfTeX 引擎。为了生成正确的目录、脚注以及交叉引用,至少需要连续编译两次。

在实际使用中,一般推荐使用自动生成工具 `latexmk` 编译文档。`latexmk` 命令可以自动进行多步编译,直到交叉引用都被解决。假设您的 TeX 源文件名为 `main.tex`,可在命令行中执行如下命令使用 XeLaTeX 编译文档

```
latexmk -xelatex main
```

也可通过修改 `latexmkrc` 配置文件来控制 `latexmk` 的行为,具体可以参考 `latexmk` 文档。

第 3 节 文档配置

本模板中的选项、命令或环境可以分为以下三类:

- 名字后面带有 \star 的,表示只能在 `sjtuthesis` 文档类中使用;
- 名字后面带有 \star 的,表示只能在 `sjturement` 和 `sjtuarticle` 文档类中使用;
- 名字后面不带有特殊符号的,一般表示在 `sjtuthesis`、`sjturement` 和 `sjtuarticle` 文档类中都可以使用,特殊情况另作说明。

3.1 文档类选项

本节所指“文档类选项”是指需要在引入文档类的时候指定的选项:

```
\documentclass[<文档类选项>]{sjtuthesis}
```

部分选项采用 $\langle key \rangle = \langle value \rangle$ 的形式,需要使用逗号分隔各选项。当 $\langle value \rangle$ 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。

3.1.1 通用选项

`type` \star `type = \langle bachelor|master|doctor \rangle`

Updated: 2022-12-03 论文类型。三种选项分别代表学士学位论文、硕士学位论文、博士学位论文。

`lang` `lang = \langle zh|en|de|ja \rangle`

Updated: 2023-03-23 论文主要语言。可选中文、英文、德文或日文,该选项会改变文档中的一些标题的名字。下文中 $\langle lang \rangle$ 可以指定为这些选项中的其中之一。

`draft` 是否开启草稿模式。`draft` 开启草稿模式,所有的图片将不会被加载,超过边界的区域将会被涂上黑色色块。`final` 关闭草稿模式。默认为 `final`。

`review` \star 盲审模式。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。

3.1.2 页面设置

`oneside` 指明论文的单双面模式。`oneside` 为单面模式,`twoside` 为双面模式。

- `twoside`
- 在 `sjtuthesis` 文档类中,默认为 `twoside`。
 - 在 `sjturement` 和 `sjtuarticle` 文档类中,默认为 `oneside`。

`openright` 指明论文是否奇数页开章。`openright` 为从奇数页开始新章,`openany` 为从任意页开始新章。

- `openany`
- 在 `sjtuthesis` 文档类中,默认为 `openright`。
 - 在 `sjturement` 文档类中,默认为 `openany`。
 - 在 `sjtuarticle` 文档类中,该选项不可用。

<code>titlepage</code>	★ 指明论文的标题形式。 <code>titlepage</code> 为使用标题页。 <code>notitlepage</code> 为使用标题块。
<code>notitlepage</code>	★
New: 2022-12-23	

- 在 `sjtuthesis` 文档类中, 该选项不可用, 只能使用标题页。
- 在 `sjturement` 文档类中, 默认为 `titlepage`。
- 在 `sjtuarticle` 文档类中, 默认为 `notitlepage`。

3.1.3 字体选项

<code>zihao</code>	<code>zihao = <-4 5></code>
Updated: 2022-12-18	

论文默认字号, 可以设定为小四号或五号。

- 在 `sjtuthesis` 和 `sjturement` 文档类中默认为小四号;
- 在 `sjtuarticle` 文档类中默认为五号。

<code>linespread</code>	<code>linespread = <数值></code>
New: 2023-10-24	

设置行距倍数。

- 在 `sjtuthesis` 文档类中默认不调整行距倍数;
- 在 `sjtuarticle` 和 `sjturement` 文档类中默认为 1.3。

<code>baselineskip</code>	<code>baselineskip = <长度 false></code>
New: 2023-10-24	

正文基线间距。

- 在 `sjtuthesis` 文档类中, 默认为 20 磅。
- 在 `sjturement` 和 `sjtuarticle` 文档类中, 默认为 `false`; 此时正文基线间距为字号的 1.2 倍。

<code>cjk-font</code>	<code>cjk-font = <auto fandol windows mac ubuntu adobe founder none></code>
-----------------------	---

指定 CJK 字体集。SJTUT_EX 预定义了一些 CJK 字体组合, 具体配置见表 2。默认情况下会根据操作系统自动配置: Windows 系统默认使用 `windows`, macOS 系统默认使用 `mac`, Linux 系统默认使用 `fandol`。找不到对应定义的 CJK 字体集时的回退选项为 `fandol`。

仅 `windows` 和 `founder` 字体集支持 pdf_LA_TE_X 直接生成 PDF。其他 CJK 字体集使用 pdf_TE_X 引擎需要先通过 _LA_TE_X 生成 DVI, 然后再使用 DVIPDFM_x 转换为 PDF。

表 2 CJK 字体配置

	宋体	黑体	仿宋	楷体	明朝体 ^c	哥特体 ^c
<code>fandol</code> ^a	Fandol 宋体	Fandol 黑体	Fandol 仿宋	Fandol 楷体	HaranoAjiMincho	HaranoAjiGothic
<code>windows</code>	(中易)宋体	(中易)黑体	(中易)仿宋	(中易)楷体	MS Mincho	MS Gothic
<code>mac</code>	(华文)宋体-简	(华文)黑体-简	华文仿宋	(华文)楷体-简	Hiragino Mincho ProN	Hiragino Kaku Gothic ProN
<code>ubuntu</code>	Noto Serif CJK SC	Noto Sans CJK SC	—	文鼎 PL 简中楷	Noto Serif CJK JP	Noto Sans CJK JP
<code>adobe</code>	Adobe 宋体	Adobe 黑体	Adobe 仿宋	Adobe 楷体	Kozuka Mincho Pr6N	Kozuka Gothic Pr6N
<code>founder</code> ^b	方正书宋	方正黑体	方正仿宋	方正楷体	IPAMincho	IPAGothic

^a 发行版中自带的 Fandol 中文字库容易出现缺字的情况; 我们建议 Linux 用户使用 `ubuntu` 选项或自行配置合适的字体; 参见 [Wiki 页面《在线使用说明》](#)。

^b 配置 `founder` 选项使用方正简繁扩展版(即 GBK 版)字体。

^c 日文模板才需要日文明朝体与哥特体; 日文字体使用 `fontspec` 宏包设置, 故日文模板不支持 pdf_TE_X 引擎, 请使用 _X_L_A_TE_X 或 Lua_L_A_TE_X 编译。

<code>text-font</code>	<code>text-font = <newtx times stixtwo xits newpx cambria newcm lm libertinus none></code>
------------------------	--

指定西文字体集。SJTUT_EX 预定义了一些西文字体组合, 具体配置见表 3。找不到定义的西文字体集时的回退选项为 `newtx`。

<code>math-font</code>	<code>math-font = <auto newtx times stixtwo xits newpx cambria newcm lm libertinus none></code>
------------------------	---

指定数学字体集。SJTUT_EX 预定义了一些数学字体组合, 具体配置见表 3 数学字体列。默认跟随西文字体 `text-font` 的设置。找不到定义的数学字体集时的回退选项为 `newtx`。

`xits`, `newcm`, `cambria` 选项仅支持 _X_L_A_TE_X/Lua_L_A_TE_X 编译。

表 3 西文字体与数学字体配置

	正文字体	无衬线字体	等宽字体	数学字体
<code>newtx</code>	TG Termes X ^a	TG Heros	TG Cursor	<code>newtx</code>
<code>times</code>	Times New Roman ^b	Arial	Courier New	<code>mathptmx</code>
	Times ^c	Helvetica	Courier	
<code>stixtwo</code>	STIX Two Text	TG Heros	TG Cursor	STIX Two Math
<code>xits</code>	XITS	TG Heros	TG Cursor	XITS Math
<code>newpx</code>	TG Pagella X	TG Heros	TG Cursor	<code>newpx</code>
<code> cambria</code>	Cambria	Calibri	Consolas	Cambria Math
<code>newcm</code>	New CM ^d	New CM Sans	New CM Mono	New CM Math
<code>lm</code>	LM Roman ^e	LM Sans	LM Mono	LM Math
<code>libertinus</code>	Libertinus Serif	Libertinus Sans	LM Mono	Libertinus Math

a “TG”是 TeX Gyre 的缩写。

b 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。

c 使用 pdf \TeX 引擎时, 实际使用对应字体的 Type 1 开源版本。

d “CM”是 Computer Modern 的缩写。

e “LM”是 Latin Modern 的缩写。

`math-style` `math-style = <ISO|TeX>`

New: 2022-12-03
Updated: 2023-01-05

数学符号样式。该选项将影响 `uppercase-greek`、`integral`、`integral-limits` 选项。默认遵循 ISO 80000-2 标准设置, 即斜体的大写希腊字母、直立的积分号以及积分号上下限置于上下方。用户也可以逐项修改数学样式。

`uppercase-greek` `uppercase-greek = <slanted|upright>`

New: 2023-01-05

大写希腊字母的正/斜体。

`integral` `integral = <slanted|upright>`

New: 2023-01-05

积分号的正/斜体。

`integral-limits` `integral-limits = <true|false>`

New: 2023-01-05

行间公式中积分号上下限的位置, `true` 使得上下限在积分号上下方, `false` 使得上下限在积分号右侧。该选项只影响行间公式, 行内公式统一居右侧, 不受影响。

3.2 论文信息设置

`\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 = {
    zh/title      = {上海交通大学学位论文模板示例文档},
    en/title      = {A Sample Document for SJTU Thesis Template},
    zh/author     = {某某},
    en/author     = {Mo Mo},
  },
  style = {
    float-num-sep = {-},
  }
}
```

```

    },
    name = {
      achv      = {攻读学位期间完成的论文},
    },
  },
}

```

3.2.1 信息域

`info` `info = {<键值列表>}`

Updated: 2023-03-14 该选项包含许多子项目,用于录入论文信息。具体内容见下。

- 在 `sjtuthesis` 文档类中,推荐使用带语言代码前缀 `<lang>` (比如 `zh` 或 `en`)的键来设定对应语言的论文信息,见第 3.2.1.1 节;省略语言前缀不带“*”的项目表示对应的中文字段、带“*”的项目表示对应的英文字段属于老用法,仍然兼容但请及时更新至新用法。
- 在 `sjtureport` 和 `sjtuarticle` 文档类中,不需要使用语言代码前缀。此时推荐直接使用标准接口来设定这些信息,这些标准接口不属于键值列表,应当直接写在导言区内,见第 3.2.1.2 节。

3.2.1.1 适用于 `sjtuthesis` 文档类的键

`info/<lang>/title` ☆ `<lang>/title = {<标题>}`

Updated: 2023-03-14 标题。

`info/<lang>/display-title` ☆ `<lang>/display-title = {<标题页标题>}`

Updated: 2023-03-14

标题页中的题目。默认为跟随对应语言的标题。如果标题过长,可以尝试使用“\”手动断行。

`info/<lang>/subject` ☆ `<lang>/subject = {<主题>}`

New: 2022-12-17

Updated: 2023-03-14

文档主题。一般显示在中文标题页校徽下方。默认值类似于“上海交通大学学士学位论文”或“A Dissertation Submitted to Shanghai Jiao Tong University for the Degree of Bachelor”。

`info/<lang>/keywords` ☆ `<lang>/keywords = {<中文关键字>}`

Updated: 2023-03-14

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。

`info/<lang>/author` ☆ `<lang>/author = {<姓名>}`

Updated: 2023-03-14

作者姓名。

`info/id` ☆ `id = {<学号>}`

学号。该键不需要语言前缀。

`info/<lang>/supervisor` ☆ `<lang>/supervisor = {<导师姓名>}`
`info/<lang>/assoc-supervisor` ☆ `<lang>/assoc-supervisor = {<副导师姓名>}`
`info/<lang>/co-supervisor` ☆ `<lang>/co-supervisor = {<联合导师姓名>}`

Updated: 2023-03-14

导师、副导师、联合导师姓名。

`info/<lang>/degree` ☆ `<lang>/degree = {<学位名称>}`

Updated: 2023-03-14

申请学位中英文名称。包括申请的学位类别和级别,如“工学硕士”、“理学博士”等。学士论文无需标注。

```
info/<lang>/department ☆ <lang>/department = {<院系名称>}
```

Updated: 2023-03-14 院系名称。

```
info/<lang>/major ☆ <lang>/major = {<专业名称>}
```

Updated: 2023-03-14 专业名称。

```
info/<lang>/fund ☆ <lang>/fund = {<资助基金名称>}
```

Updated: 2023-03-14 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。

```
info/date ☆ date = {<ISO 日期>}
```

Updated: 2023-02-25 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 或 yyyy-mm, 否则设定无效。该键语言前缀不是必须的。

```
info/<lang>/display-date ☆ <lang>/display-date = {<日期文字>}
```

Updated: 2023-03-14

显示日期,可以显示不同于标准日期格式的日期,日期文字将会被原样输出。设定该键时,将会覆盖 info/date 键在对应语言下的设定。

3.2.1.2 适用于 sjtureport 和 sjtuarticle 文档类的命令

```
\title ☆ \title{<标题>}
```

New: 2022-12-17 设置标题,覆盖 info/title 键的值。
Updated: 2023-03-14

```
\author ☆ \author{<姓名>}
```

New: 2022-12-17 设置作者姓名,覆盖 info/author 键的值。
Updated: 2023-03-14

```
\date ☆ \date{<日期>}
```

New: 2022-12-17 设置日期,覆盖 info/display-date 键的值。日期会被原样显示。
Updated: 2023-03-14

```
\subject ☆ \subject{<主题>}
```

New: 2023-03-14 文档主题。覆盖 info/subject 键的值。

```
\keywords ☆ \keywords{<关键词>}
```

New: 2023-03-14 文档关键词,使用英文逗号隔开不同的关键词。覆盖 info/keywords 键的值。

3.2.2 样式域

```
style style = {<键值列表>}
```

该选项包含许多子项目,用于设置论文样式。具体内容见下。

```
style/indent-first indent-first = <true|false>
```

New: 2024-01-10 章节标题后首段是否缩进。

```
style/equation-font equation-font = {<字体设置>}
```

New: 2023-11-30 行间数学公式的字体设置,该选项主要用于调整行间公式的行距,不建议修改字号字形。sj-tuthesis 中默认数学公式的行距为字号的 1.2 倍。

<code>style/float-font</code>	<code>float-font = {<字体设置>}</code>
New: 2022-12-03 Updated: 2022-12-27	图、表等浮动体的额外字体设置。默认为 <code>\zihao{5}</code> , 五号字。
<code>style/caption-font</code>	<code>caption-font = {<字体设置>}</code>
New: 2022-12-20	题注字体。默认为 <code>\zihao{5}\bfseries</code> , 粗体五号字。
<code>style/subcaption-font</code>	<code>subcaption-font = {<字体设置>}</code>
New: 2022-12-20	子图题注字体。默认为 <code>\zihao{5}\normalfont</code> , 正常字重五号字。
<code>style/fnmark-style</code>	<code>fnmark-style = <plain circled></code>
New: 2023-03-28	脚注数字编号样式。plain 表示使用普通数字编号; circled 表示使用带圈数字编号。在 zh 和 ja 语言设置中, 默认为 circled; 在 en 和 de 语言设置中, 默认为 plain。 使用带圈数字编号时, 由于超过 50 的带圈数字没有对应的 Unicode 码位, 所以每页脚注最好不要超过 50 个。带圈数字默认使用 CJK 字体。通常情况下默认字体不一定包含所有带圈数字的字符, 此时可以设置 <code>fnmark-font</code> 选项给带圈数字设置合适的字体。
<code>style/fnmark-font</code>	<code>fnmark-font = <haranoaji {<字体设置>}></code>
New: 2022-12-03 Updated: 2023-03-28	脚注编号的额外字体设置。默认为空。可以使用预设 <code>haranoaji</code> , 支持在 Unicode 引擎中使用 HaranoAjiMincho 字体中的带圈数字。
<code>style/num-sep</code>	<code>num-sep = {<分隔符>}</code>
New: 2023-12-02	图、表、公式以及定理编号中的分隔符。该选项将统一设定 <code>float-num-sep</code> 、 <code>equation-num-sep</code> 、 <code>theorem-num-sep</code> 选项。用户也可以逐项修改编号分隔符。默认为 . 句点。
<code>style/float-num-sep</code>	<code>float-num-sep = {<分隔符>}</code>
Updated: 2023-11-29	图、表等浮动体编号中的分隔符。
<code>style/equation-num-sep</code>	<code>equation-num-sep = {<分隔符>}</code>
Updated: 2023-11-29	公式编号中的分隔符。
<code>style/theorem-num-sep</code>	<code>theorem-num-sep = {<分隔符>}</code>
New: 2023-12-02	定理编号中的分隔符。
<code>style/header-uppercase</code>	<code>header-uppercase = <true false></code>
New: 2022-12-20 Updated: 2023-03-14	页眉英文字母是否大写。默认为 false。
<code>style/header-font</code>	<code>header-font = {<页眉字体>}</code>
New: 2022-12-20	页眉字体。 <ul style="list-style-type: none">在 <code>sjtuthesis</code> 文档类中, 默认为 <code>\zihao{-5}</code>, 小五号字。在 <code>sjturement</code> 和 <code>sjtuarticle</code> 文档类中, 默认为 <code>\zihao{-5}\sffamily</code>, 小五号字黑体。
<code>style/footer-font</code>	<code>footer-font = {<页脚字体>}</code>
New: 2022-12-20	页脚字体。默认为 <code>\zihao{-5}</code> , 小五号字。
<code>style/page-number</code>	<code>page-number = {<页码设置>}</code>
New: 2022-12-03	设置页码的显示样式, 其中 #1 代表当前页码。默认为 <code>{#1}</code> , 即仅显示页码本身。
<code>style/keywords-format</code>	<code>keywords-format = <plain hang></code>
New: 2023-11-30	设置关键词格式。默认为 plain 无缩进的普通段落, 另可选 hang 悬挂格式。

3.2.3 名称域

`name` `name = {<键值列表>}`

选项包含许多子项目,用于设置论文中一些标题的名称。部分选项只能在 `sjtuthesis` 中使用。具体内容见表 4。

`name/contents`
`name/listfigure`
`name/listtable`
`name/figure`
`name/table`
`name/abstract`
`name/index`
`name/appendix`
`name/proof`
`name/bib`
`name/figure*`
`name/table*`
`name/algorithm`
`name/listalgorithm`
`name/abbr`
`name/nom`
`name/ack`
`name/resume`
`name/digest`
`name/achv`

Updated: 2023-03-18

表 4 name 选项的默认设置

选项	lang = zh	lang = en	lang = de	lang = ja
<code>contents</code>	目录	Contents	Inhaltsverzeichnis	目次
<code>listfigure</code>	插图	List of Figures	Abbildungsverzeichnis	図目次
<code>listtable</code>	表格	List of Tables	Tabellenverzeichnis	表目次
<code>figure</code>	图	Figure	Abbildung	図
<code>table</code>	表	Table	Tabelle	表
<code>abstract</code> ☆	摘要	Abstract	Zusammenfassung	概要
<code>index</code>	索引	Index	Index	索引
<code>appendix</code>	附录	Appendix	Anhang	付録
<code>proof</code>	证明	Proof	Beweis	证明
<code>bib</code>	参考文献	Bibliography	Literaturverzeichnis	参考文献
<code>figure*</code>	Figure	图	Figure	Figure
<code>table*</code>	Table	表	Table	Table
<code>algorithm</code>	算法	Algorithm	Algorithmus	アルゴリズム
<code>listalgorithm</code>	算法	List of Algorithms	Algorithmenverzeichnis	アルゴリズム目次
<code>abbr</code> ☆	缩略语对照表	Abbreviation	Abkürzungsverzeichnis	略語表
<code>nom</code> ☆	主要符号对照表	Nomenclature	Symbolverzeichnis	記号表
<code>ack</code> ☆	致谢	Acknowledgements	Danksagungen	謝辞
<code>resume</code> ☆	个人简历	Resume	Lebenslauf	履歴書
<code>digest</code> ☆	大摘要	Digest	Kurzfassung	要約
<code>achv</code> ☆	学术论文和科研成果目录	List of Research Achievements	Forschungsleistungen	研究業績書

第4节 内容编写

`document` `\begin{document}`
 <文档内容>
`\end{document}`

在文档开始后内容进行编写,文档内容由 `document` 环境包裹。

4.1 标题页和声明页

`\maketitle` `\maketitle`

Updated: 2022-12-03 生成标题。

- 在 `sjtuthesis` 文档类中,生成标题页。
- 在 `sjturement` 和 `sjtuarticle` 文档类中,
 - 若处于 `titlepage` 文档类选项中,生成标题页。`sjturement` 文档类默认。
 - 若处于 `notitlepage` 文档类选项中,生成标题块。`sjtuarticle` 文档类默认。

`\copyrightpage` ☆ `\copyrightpage`
`\copyrightpage` [(授权书扫描件)]

Updated: 2022-12-20

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,使用可选参数时需要手动加载 `pdfpages` 宏包。

4.2 前文部分

`\frontmatter` ☆ `\frontmatter`

声明前文部分开始。

`abstract` `\begin{abstract}[\lang]`
(摘要)

Updated: 2023-11-29

`\end{abstract}`
`\begin{abstract}`
(摘要)
`\end{abstract}`

摘要环境。会在结尾添加关键词。

- `sjtuthesis` 文档类中, 可以设置可选参数指定摘要的语言, 默认为 `zh`。
- `sjtuarticle` 和 `sjturement` 文档类中, 不需要可选参数。

`abstract*` ☆ `sjtuthesis` 文档类中使用带星号的 `abstract*` 环境不会出现在目录中。

Updated: 2023-11-29

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

目录、插图、表格和算法等索引命令如表 5 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。

表 5 目录和索引表

用途	命令	用途	命令
目录	<code>\tableofcontents</code>	插图索引	<code>\listoffigures</code>
	<code>\tableofcontents*</code>		<code>\listoffigures*</code>
表格索引	<code>\listoftables</code>	算法索引 ^a	<code>\listofalgorithms</code>
	<code>\listoftables*</code>		<code>\listofalgorithms*</code>

a 启用 `algorithm2e` 或 `algorithm` 后有效。

4.3 正文部分

`\mainmatter` ☆ `\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[⟨脚注编号⟩]{⟨脚注文字⟩}`

Updated: 2022-12-03

插入脚注。其中脚注编号参数是可选的, 一般不需要输入。

`assumption`
`axiom`
`conjecture`
`corollary`
`definition`
`example`
`exercise`
`lemma`
`problem`
`proposition`
`theorem`

SJTUT_EX 预定义了一系列数学环境。在启用 `ntheorem` 或 `amsthm` 宏包后有效, 环境如表 6 所示。

表 6 预定义的数学环境

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

`\setbaselineskip` `\setbaselineskip{⟨长度⟩}`

New: 2023-10-24

设置当前的基线间距, 一般在字号命令之后使用。

`\appendix` `\appendix`

附录由 `\appendix` 命令开启, 然后像正文一样书写。

`nomenclature` ☆ `\begin{nomenclature}`[(标题)]
`nomenclature*` ☆ `\end{nomenclature}`
 (符号对照表)

Updated: 2022-03-02

符号对照表环境。带星号的版本不会出现在目录中。可以使用可选参数手动设置标题。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 `nomenc` 宏包。

`abbreviation` ☆ `\begin{abbreviation}`[(标题)]
`abbreviation*` ☆ `\end{abbreviation}`
 (缩略语对照表)

Updated: 2022-03-02

缩略语对照表环境。带星号的版本不会出现在目录中。可以使用可选参数手动设置标题。缩略语对照表环境仅设置标题, 内部实现可由用户自行决定。

4.4 后文部分

`\backmatter` ☆ `\backmatter`

声明后文部分开始。后文部分包含致谢等。

`acknowledgements` ☆ `\begin{acknowledgements}`[(标题)]
 (致谢内容)
`\end{acknowledgements}`

Updated: 2022-02-24

致谢环境。盲审模式下致谢将被隐去。可以使用可选参数手动设置标题。

`achievements` ☆ `\begin{achievements}`[(标题)]
 (获得的科研成果)
`\end{achievements}`

Updated: 2022-02-24

科研成果环境, 可以使用可选参数手动设置标题。内部请配合使用下面的附录用文献列表环境 `bibliolist` 和 `bibliolist*`。你可以在该环境中使用带星号的节次命令以分隔不同类型的成果(比如学术论文、专利等); 你也可以使用多个 `achievements` 环境, 配合不同的可选参数作为标题, 展示不同类型的成果。

`bibliolist` ☆ `\begin{bibliolist}`{(最长条目编号)}
`bibliolist*` ☆ `\item` (文献条目)
`\end{bibliolist}`
`\begin{bibliolist*}`{(最长条目编号)}
`\item` (文献条目 (隐去姓名))
`\end{bibliolist*}`

Updated: 2022-03-23

附录用文献环境, 只允许在 `achievements` 环境中使用。需要指定最长条目的编号作为参数, 比如 99; 如果将该强制参数被指定为空, 将不显示编号, 每条以悬挂缩进做区分。环境内部使用 `\item` 来分隔各条目, 在同一个 `achievements` 环境内、不同的 `bibliolist` 或 `bibliolist*` 环境中编号连续递增、不会间断。普通模式下显示 `bibliolist` 中的内容, 盲审模式下显示 `bibliolist*` 中的内容。

`resume` ☆ `\begin{resume}`[(标题)]
 (简历内容)
`\end{resume}`

Updated: 2022-02-24

简历环境。盲审模式下简历将被隐去。可以使用可选参数手动设置标题。

`digest` ☆ `\begin{digest}`[(lang)]
 (大摘要)
`\end{digest}`

学士论文大摘要, 使用可选参数设定语言, 默认为 `en`。

第 5 节 宏包依赖情况

使用不同编译方式、指定不同选项,会导致宏包依赖情况有所不同。具体如下:

- 在任何情况下,文档类都会显式调用以下宏包(或文档类):
 - `ctexbook`, `ctexrep` 和 `ctexart`, 提供中文排版的通用框架。属于 CT_EX 宏集 [8]。
 - `mathtools`, 对 $\text{L}_A\text{T}_E\text{X}$ 的数学排版功能进行了全面扩展。是 `amsmath` 的扩充。
 - `geometry`, 用于调整页面尺寸。
 - `fancyhdr`, 处理页眉页脚。
 - `tocloft`, 设置目录格式。
 - `caption`, `bicaption` 和 `subcaption`, 用于设置题注。
 - `xcolor`, 提供彩色支持。
 - `graphicx`, 提供图形插入的接口。
 - `enumitem`, 设置列表环境格式。
- `sjtuthesis` 会调用 `xtemplate` 和 `array`, 用于辅助标题页等特殊页面的排版。
- 部分西文与数学字体预设会调用相关的字体宏包, 具体调用情况请参见对应的字体预设文件。
- 部分数字字体预设会调用 `unicode-math` 处理 Unicode 编码的 OpenType 数学字体。在未启用 `unicode-math` 的情况下, 会调用 `bm` 来选择粗体数学符号。

这里只列出了本模板直接调用的宏包。这些宏包自身的调用情况, 此处不再具体展开。如有需要, 请参阅相关文档。

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宏包、模版

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源代码: [CTAN://macros/latex/base/source2e.pdf](https://ctan.org/macros/latex/base/source2e.pdf)

³此代码只可作为学习之用。未经 Knuth 本人同意, 您不应当编译此文档。

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文档及源代码: [CTAN://macros/latex/contrib/thuthesis/thuthesis.pdf](https://ctan.org/macros/latex/contrib/thuthesis/thuthesis.pdf)

第 6 节 代码实现

本模板使用 L^AT_EX3 语法编写, 依赖 `expl3` 环境, 并需调用 `l3packages` 中的相关宏包。

```
1 <@@=sjtu>
```

6.1 内部变量

```
\l__sjtu_tmp_bool 临时变量。
\l__sjtu_tmp_clist 2 <*class>
\l__sjtu_tmp_dim 3 \bool_new:N \l__sjtu_tmp_bool
\l__sjtu_tmp_skip <thesis> 4 \clist_new:N \l__sjtu_tmp_clist
\l__sjtu_tmp_box <thesis> 5 \dim_new:N \l__sjtu_tmp_dim
6 \skip_new:N \l__sjtu_tmp_skip
7 \box_new:N \l__sjtu_tmp_box

\g__sjtu_thesis_type_int 论文类型。
<thesis> 8 \int_new:N \g__sjtu_thesis_type_int

\g__sjtu_lang_tl 论文语言。
\g__sjtu_lang_clist 9 \tl_new:N \g__sjtu_lang_tl
\c__sjtu_lang_de_tl <thesis> 10 \clist_set:Nn \g__sjtu_lang_clist { zh, en }
\c__sjtu_lang_ja_tl 11 \tl_const:Nn \c__sjtu_lang_de_tl { de }
12 \tl_const:Nn \c__sjtu_lang_ja_tl { ja }

\g__sjtu_zihao_tl 字号大小与行距。
\g__sjtu_font_size_int 13 \tl_new:N \g__sjtu_zihao_tl
\g__sjtu_font_size_dim 14 \int_new:N \g__sjtu_font_size_int
\g__sjtu_baseline_skip_dim 15 \dim_new:N \g__sjtu_font_size_dim
\g__sjtu_fixed_baselineskip_bool 16 \dim_new:N \g__sjtu_baseline_skip_dim
\g__sjtu_line_spread_fp 17 \bool_new:N \g__sjtu_fixed_baselineskip_bool
18 \fp_new:N \g__sjtu_line_spread_fp

\g__sjtu_text_font_tl 字体配置。
\g__sjtu_math_font_tl 19 \tl_new:N \g__sjtu_text_font_tl
\g__sjtu_cjk_font_tl 20 \tl_new:N \g__sjtu_math_font_tl
21 \tl_new:N \g__sjtu_cjk_font_tl

\g__sjtu_slanted_uppercase_greek_bool 大写希腊字母的正/斜体。
22 \bool_new:N \g__sjtu_slanted_uppercase_greek_bool

\g__sjtu_upright_integral_bool 积分号的正/斜体。
23 \bool_new:N \g__sjtu_upright_integral_bool

\g__sjtu_integral_limits_bool 积分号上下限的位置。
24 \bool_new:N \g__sjtu_integral_limits_bool

\g__sjtu_math_font_options_clist 传入数学字体宏包的选项列表。
25 \clist_new:N \g__sjtu_math_font_options_clist

\g__sjtu_review_bool 盲审模式。
<thesis> 26 \bool_new:N \g__sjtu_review_bool

\g__sjtu_options_to_ctex_class_clist 保存由 sjtutex 传入 ctex 文档类的选项列表。默认 ctex 文档类的选项: 使用 UTF8 编码, 不调整基础类的版式以及不载入 ctex 字体预设配置。
27 \clist_set:Nn \g__sjtu_options_to_ctex_class_clist
28 { a4paper, UTF8, scheme = plain, fontset = none }
```

```

\g__sjtu_options_to_packages_clist 保存由传入其他宏包的选项列表。
    29 \clist_new:N \g__sjtu_options_to_packages_clist

\g__sjtu_twoside_bool 是否开启双页模式。
    30 \bool_new:N \g__sjtu_twoside_bool
<thesis> 31 \bool_set_true:N \g__sjtu_twoside_bool
<!thesis> 32 \bool_set_false:N \g__sjtu_twoside_bool

\g__sjtu_openright_bool 是否在奇数页开始新章。
<!article> 33 \bool_new:N \g__sjtu_openright_bool
<thesis> 34 \bool_set_true:N \g__sjtu_openright_bool
<report> 35 \bool_set_false:N \g__sjtu_openright_bool

\g__sjtu_titlepage_bool 是否生成标题页。
<!thesis> 36 \bool_new:N \g__sjtu_titlepage_bool
<report> 37 \bool_set_true:N \g__sjtu_titlepage_bool
<article> 38 \bool_set_false:N \g__sjtu_titlepage_bool

\g__sjtu_draft_bool 是否开启草稿模式。
    39 \bool_new:N \g__sjtu_draft_bool

__sjtu_deprecated_option:n 对过时选项给出警告。
__sjtu_set_deprecated_option:n
    40 \cs_new_protected:Npn __sjtu_deprecated_option:n
    41   { \msg_warning:nnn { sjtutex } { deprecated-option } }
    42 \cs_new_protected:Npn __sjtu_set_deprecated_option:n #1
    43   {
    44     __sjtu_deprecated_option:n { Option~`#1'~ is~ set. }
    45     \keys_set:nn { sjtu / option } {#1}
    46   }
    47 \msg_new:nnn { sjtutex } { deprecated-option }
    48   { Option~`\l_keys_key_tl'~ is~ deprecated. \\ #1 }

```

6.2 选项处理

定义 sjtu/option 键值类。

```

49 \keys_define:nn { sjtu / option }
50   {

```

type 论文类型。

```

51 <*thesis>
52   type .choice: ,
53   type .value_required:n = true ,
54   type .choices:nn =
55     { bachelor, master, doctor }
56     { \int_gset_eq:NN \g__sjtu_thesis_type_int \l_keys_choice_int } ,
57   type .initial:n = { master } ,
58 </thesis>

```

lang 论文主要语言。

```

59   lang .choice: ,
60   lang .value_required:n = true ,
61   lang .choices:nn =
62     { zh, en, de, ja }
63     {
64       \tl_gset_eq:NN \g__sjtu_lang_tl \l_keys_choice_tl
65 <*thesis>
66       \clist_if_in:NnF \g__sjtu_lang_clist {#1}
67       { \clist_gput_right:Nn \g__sjtu_lang_clist {#1} }
68 </thesis>
69     } ,
70   lang .initial:n = { zh } ,

```


zihao 字号大小。

```

71   zihao .choice: ,
72   zihao .value_required:n = true ,
73   zihao / 5 .code:n =
74   {
75     \tl_gset:Nn \g__sjtu_zihao_tl {#1}
76     \int_gset:Nn \g__sjtu_font_size_int { 1 }
77     \dim_gset:Nn \g__sjtu_font_size_dim { 10.5 bp }
78   } ,
79   zihao / -4 .code:n =
80   {
81     \tl_gset:Nn \g__sjtu_zihao_tl {#1}
82     \int_gset:Nn \g__sjtu_font_size_int { 2 }
83     \dim_gset:Nn \g__sjtu_font_size_dim { 12 bp }
84   } ,
<|article> 85   zihao .initial:n = { -4 } ,
<|article> 86   zihao .initial:n = { 5 } ,

```

linespread 行距倍数。

```

87   linespread .fp_gset:N = \g__sjtu_line_spread_fp ,
88   linespread .initial:n = { \c_nan_fp } ,
89   linespread .value_required:n = true ,

```

baselineskip 正文基线间距。

```

90   baselineskip .choice: ,
91   baselineskip .value_required:n = true ,
92   baselineskip / false .code:n =
93   { \bool_gset_false:N \g__sjtu_fixed_baselineskip_bool } ,
94   baselineskip / unknown .code:n =
95   {
96     \bool_gset_true:N \g__sjtu_fixed_baselineskip_bool
97     \dim_gset:Nn \g__sjtu_baseline_skip_dim {#1}
98   } ,
<|thesis> 99   baselineskip .initial:n = { 20 bp } ,
<|thesis> 100  baselineskip .initial:n = { false } ,

```

text-font 字体配置。

```

<|math-font> 101  text-font .tl_gset:N = \g__sjtu_text_font_tl ,
<|cjk-font> 102  text-font .initial:n = { newtx } ,
103  math-font .tl_gset:N = \g__sjtu_math_font_tl ,
104  cjk-font .tl_gset:N = \g__sjtu_cjk_font_tl ,

```

fontset 是过时选项。

```

105  fontset .code:n = { \__sjtu_set_deprecated_option:n { cjk-font = #1 } } ,

```

math-style 数学符号样式。

```

106  math-style .choice: ,
107  math-style .value_required:n = true ,
108  math-style / TeX .code:n =
109  {
110    \bool_gset_false:N \g__sjtu_slanted_uppercase_greek_bool
111    \bool_gset_false:N \g__sjtu_upright_integral_bool
112    \bool_gset_false:N \g__sjtu_integral_limits_bool
113  } ,
114  math-style / ISO .code:n =
115  {
116    \bool_gset_true:N \g__sjtu_slanted_uppercase_greek_bool
117    \bool_gset_true:N \g__sjtu_upright_integral_bool
118    \bool_gset_true:N \g__sjtu_integral_limits_bool
119  } ,
120  math-style .initial:n = { ISO } ,

```

uppercase-greek 大写希腊字母的正/斜体。

```

121 uppercase-greek .choice: ,
122 uppercase-greek .value_required:n = true ,
123 uppercase-greek / slanted .code:n =
124   { \bool_gset_true:N \g__sjtu_slanted_uppercase_greek_bool } ,
125 uppercase-greek / upright .code:n =
126   { \bool_gset_false:N \g__sjtu_slanted_uppercase_greek_bool } ,

```

integral 积分号的正/斜体。

```

127 integral .choice: ,
128 integral .value_required:n = true ,
129 integral / slanted .code:n =
130   { \bool_gset_false:N \g__sjtu_upright_integral_bool } ,
131 integral / upright .code:n =
132   { \bool_gset_true:N \g__sjtu_upright_integral_bool } ,

```

integral-limits 积分号上下限的位置。

```

133 integral-limits .choice: ,
134 integral-limits .value_required:n = true ,
135 integral-limits / false .code:n =
136   { \bool_gset_false:N \g__sjtu_integral_limits_bool } ,
137 integral-limits / true .code:n =
138   { \bool_gset_true:N \g__sjtu_integral_limits_bool } ,

```

oneside 单面或双面模式。

twoside

```

139 oneside .value_forbidden:n = true,
140 twoside .value_forbidden:n = true,
141 oneside .code:n =
142   { \bool_gset_false:N \g__sjtu_twoside_bool } ,
143 twoside .code:n =
144   { \bool_gset_true:N \g__sjtu_twoside_bool } ,

```

openany 是否奇数页开章。

openright

```

145 <!*article>
146 openany .value_forbidden:n = true,
147 openright .value_forbidden:n = true,
148 openany .code:n =
149   { \bool_gset_false:N \g__sjtu_openright_bool } ,
150 openright .code:n =
151   { \bool_gset_true:N \g__sjtu_openright_bool } ,
152 </!article>

```

titlepage 是否生成标题页。

notitlepage

```

153 <!*thesis>
154 titlepage .value_forbidden:n = true,
155 notitlepage .value_forbidden:n = true,
156 titlepage .code:n =
157   { \bool_gset_true:N \g__sjtu_titlepage_bool } ,
158 notitlepage .code:n =
159   { \bool_gset_false:N \g__sjtu_titlepage_bool } ,
160 </!thesis>

```

draft 是否开启草稿模式。

final

```

161 draft .value_forbidden:n = true,
162 final .value_forbidden:n = true,
163 draft .code:n =
164   { \bool_gset_true:N \g__sjtu_draft_bool } ,
165 final .code:n =
166   { \bool_gset_false:N \g__sjtu_draft_bool } ,

```

review 盲审模式。

```

<thesis> 167 review .bool_gset:N = \g__sjtu_review_bool ,
<thesis> 168 review .initial:n = false ,

```

处理未知选项。

```

169   unknown .code:n = { \msg_error:nn { sjtutex } { unknown-option } }
170 }
171 \msg_new:nnn { sjtutex } { unknown-option }
172 { Class~ option~ "\l_keys_key_tl"~ is~ unknown. }

```

将文档类选项传给 sjtu/option。

```

173 \cs_if_exist:NTF \ProcessKeyOptions
174 { \ProcessKeyOptions [ sjtu / option ] }
175 {
176   \RequirePackage { l3keys2e }
177   \ProcessKeysOptions { sjtu / option }
178 }

```

sjturement 和 sjtuarticle 文档类默认使用 1.3 行距倍数。

```

179 <!*thesis>
180 \bool_if:NF \g__sjtu_fixed_baselineskip_bool
181 {
182   \fp_if_nan:nT { \g__sjtu_line_spread_fp }
183   { \fp_set:Nn \g__sjtu_line_spread_fp { 1.3 } }
184 }
185 </!*thesis>

```

数字字体宏包选项。

```

186 \clist_set:Nx \g__sjtu_math_font_options_clist
187 {
188   \bool_if:NT \g__sjtu_slanted_uppercase_greek_bool
189   { slantedGreek } ,
190   \bool_if:NT \g__sjtu_upright_integral_bool
191   { upint }
192 }

```

追加全局选项。

```

193 \clist_put_right:Nx \@classoptionslist
194 {
195   a4paper ,
196   \tl_if_eq:NNT \g__sjtu_lang_tl \c__sjtu_lang_de_tl
197   { german, ngerman } ,
198   \bool_if:NT \g__sjtu_integral_limits_bool
199   { intlimits } ,
200   \g__sjtu_math_font_options_clist
201 }

```

设置传入 ctex 文档类的选项。

```

202 \clist_put_right:Nx \g__sjtu_options_to_ctex_class_clist
203 {
204   zihao      = \g__sjtu_zihao_tl ,
205   \fp_if_nan:nF { \g__sjtu_line_spread_fp }
206   { linespread = \fp_use:N \g__sjtu_line_spread_fp } ,
207   \bool_if:NTF \g__sjtu_twoside_bool
208   { twoside } { oneside } ,
<!article> 209   \bool_if:NTF \g__sjtu_openright_bool
<!article> 210   { openright } { openany } ,
<!thesis> 211   \bool_if:NTF \g__sjtu_titlepage_bool
<!thesis> 212   { titlepage } { notitlepage } ,
213   \bool_if:NTF \g__sjtu_draft_bool
214   { draft } { final }
215 }

```

6.3 载入宏包、文档类

将选项传入 `ctex` 文档类。

```
216 \exp_args:No \PassOptionsToClass
217 { \g__sjtu_options_to_ctex_class_clist }
<thesis> 218 { ctexbook }
<report> 219 { ctexrep }
<article> 220 { ctexart }
```

传入各宏包选项。

```
221 \clist_set:Nx \g__sjtu_options_to_packages_clist
222 {
223   { no-math          } { fontspec      } ,
224   { titles          } { tocloft      } ,
225   { list = off      } { bcaption   } ,
226   { warnings-off =
227     {
228       mathtools-overbracket,
229       mathtools-colon
230     }
231   } { unicode-math } ,
232   { amsmath, thmmarks } { ntheorem   } ,
<!article> 233   { chapter          } { algorithm   } ,
<!article> 234   { algochapter      } { algorithm2e } ,
235   {
236     \bool_if:NTF \g__sjtu_integral_limits_bool
237       { displaylimits } { nolimits }
238   } { cmupint      }
239 }
240 \clist_map_inline:Nn \g__sjtu_options_to_packages_clist
241 { \PassOptionsToPackage #1 }
```

载入 `ctex` 文档类。在使用 \XeTeX 编译时, `ctex` 的底层将调用 `xeCJK` 宏包; 而在使用 \LuaTeX 编译时, 则将调用 `LuaTeX-ja` 宏包。两种情况下 `ctex` 均会调用 `fontspec` 宏包。

```
<thesis> 242 \LoadClass { ctexbook }
<report> 243 \LoadClass { ctexrep }
<article> 244 \LoadClass { ctexart }
```

载入各宏包。

```
245 \RequirePackage
246 {
<thesis> 247   xtemplate,
<thesis> 248   array,
249   mathtools,
250   geometry,
251   fancyhdr,
252   tocloft,
253   caption,
254   bcaption,
255   subcaption,
256   xcolor,
257   graphicx,
258   enumitem
259 }
```

6.4 内部定义

6.4.1 内部函数

`\cs_gset:cpo` \LaTeX3 函数变体。

```
\tl_const:Nv
\clist_use:NV
\clist_use:cv
\exp_args:NNnv
\exp_last_unbraced:ce
\regex_match:neTF
260 \cs_generate_variant:Nn \cs_gset:Npn { cpo }
261 \cs_generate_variant:Nn \tl_const:Nn { Nv }
262 \cs_generate_variant:Nn \clist_use:Nn { NV, cv }
```

```

263 \exp_args_generate:n { Nnv }
264 \cs_generate_variant:Nn \exp_last_unbraced:Ne { ce }
265 \prg_generate_conditional_variant:Nnn \regex_match:nn { ne } { T, TF }

```

`__sjtu_engine_case:nn` 2 个参数依次为 pdfTeX 和 XeTeX/LuaTeX。

```

266 \cs_new:Npx \__sjtu_engine_case:nn #1#2
267 {
268   \bool_lazy_or:nnTF
269     { \sys_if_engine_xetex_p: }
270     { \sys_if_engine luatex_p: }
271     {#2}
272     { \sys_if_engine_pdftex:T {#1} }
273 }

```

`__sjtu_engine_case:nnn` 3 个参数依次为 pdfTeX、XeTeX 和 LuaTeX。

```

274 \cs_new:Npx \__sjtu_engine_case:nnn #1#2#3
275 {
276   \sys_if_engine_xetex:TF
277     {#2}
278     {
279       \sys_if_engine luatex:TF
280         {#3}
281         { \sys_if_engine_pdftex:T {#1} }
282     }
283 }

```

`__sjtu_unicode_engine_case:nn` 2 个参数依次为 XeTeX 和 LuaTeX。

```

284 \cs_new:Npx \__sjtu_unicode_engine_case:nn #1#2
285 {
286   \sys_if_engine_xetex:TF
287     {#1}
288     { \sys_if_engine luatex:T {#2} }
289 }

```

`__sjtu_unicode_char:n` 290 `__sjtu_engine_case:nn`

```

291 {
292   \cs_new:Npn \__sjtu_unicode_char:n #1
293     {
294       \exp_not:N \Unicode
295       { \int_div_truncate:nn {#1} { 256 } }
296       { \int_mod:nn {#1} { 256 } }
297     }
298 }
299 { \cs_new:Npn \__sjtu_unicode_char:n #1 { \tex_Uchar:D #1 \scan_stop: } }

```

`__sjtu_preto_cmd:Nn` 补丁工具, 来自 `ctexpatch` 宏包, 在宏的原本定义前后增加钩子。

```

\__sjtu_appto_cmd:Nn
300 <!*thesis>
301 \cs_new_protected:Npn \__sjtu_preto_cmd:Nn #1#2
302 {
303   \ctex_preto_cmd:NnnTF #1 { } {#2}
304   { } { \ctex_patch_failure:N #1 }
305 }
306 \cs_new_protected:Npn \__sjtu_appto_cmd:Nn #1#2
307 {
308   \ctex_appto_cmd:NnnTF #1 { } {#2}
309   { } { \ctex_patch_failure:N #1 }
310 }
311 <!/thesis>

```

`__sjtu_dim_set_to_wd:Nn` 操作长度变量的辅助函数。

```

\__sjtu_skip_add_to_wd:Nn
312 <!*thesis>
313 \cs_new:Npn \__sjtu_dim_set_to_wd:Nn #1#2
314 {
315   \hbox_set:Nn \l__sjtu_tmp_box {#2}

```

```

316   \dim_set:Nn #1 { \box_wd:N \l__sjtu_tmp_box }
317 }
318 </thesis>
319 \cs_new:Npn \__sjtu_skip_add_to_wd:Nn #1#2
320 {
321   \hbox_set:Nn \l__sjtu_tmp_box {#2}
322   \skip_add:Nn #1 { \box_wd:N \l__sjtu_tmp_box }
323 }
<thesis> 324 \cs_generate_variant:Nn \__sjtu_dim_set_to_wd:Nn { Nv }
325 \cs_generate_variant:Nn \__sjtu_skip_add_to_wd:Nn { cv }
\__sjtu_cs_provide_eq:NN 326 \cs_new:Npn \__sjtu_cs_provide_eq:NN #1#2
327 { \cs_if_exist:NF #1 { \cs_set_eq:NN #1 #2 } }
328 \cs_generate_variant:Nn \__sjtu_cs_provide_eq:NN { cc }

```

__sjtu_vspace:N 类似 L^AT_EX_{2 ϵ} 中的 \vspace 和 \vspace*。

```

\__sjtu_vspace:n 329 <*thesis>
\__sjtu_vspace_r:N 330 \cs_new_protected:Npn \__sjtu_vspace:N #1
\__sjtu_vspace_r:n 331 {
332   \skip_vertical:N #1
333   \skip_vertical:N \c_zero_skip
334 }
335 \cs_new_protected:Npn \__sjtu_vspace:n #1
336 {
337   \skip_set:Nn \l__sjtu_tmp_skip {#1}
338   \__sjtu_vspace:N \l__sjtu_tmp_skip
339 }
340 \cs_new_protected:Npn \__sjtu_vspace_r:N #1
341 {
342   \dim_set_eq:NN \l__sjtu_tmp_dim \prevdepth
343   \hrule height \c_zero_dim
344   \nobreak
345   \skip_vertical:N #1
346   \skip_vertical:N \c_zero_skip
347   \dim_set_eq:NN \prevdepth \l__sjtu_tmp_dim
348 }
349 \cs_new_protected:Npn \__sjtu_vspace_r:n #1
350 {
351   \skip_set:Nn \l__sjtu_tmp_skip {#1}
352   \__sjtu_vspace_r:N \l__sjtu_tmp_skip
353 }
354 </thesis>

```

__sjtu_define_name:nn 定义默认名称的辅助函数。

```

\__sjtu_define_name:nv 355 \cs_new_protected:Npn \__sjtu_define_name:nn #1#2
\__sjtu_define_name:nnn 356 { \tl_const:cn { c__sjtu_name_ #1 _tl } {#2} }
\__sjtu_define_name_from_clist:nnnn 357 \cs_new_protected:Npn \__sjtu_define_name:nnn #1#2#3
358 { \tl_const:cn { c__sjtu_name_ #2 _ #1 _tl } {#3} }
359 <*thesis>
360 \cs_new_protected:Npn \__sjtu_define_name_from_clist:nnnn #1#2#3#4
361 { \tl_const:cx { c__sjtu_name_ #2 _ #1 _tl } { \clist_item:nn {#4} {#3} } }
362 \cs_generate_variant:Nn \__sjtu_define_name:nn { nv }
363 </thesis>

```

__sjtu_define_symbol:nn 定义符号的辅助函数。

```

364 \cs_new_protected:Npn \__sjtu_define_symbol:nn #1#2
365 { \tl_const:cx { c__sjtu_symbol_ #1 _tl } { \__sjtu_unicode_char:n {#2} } }

```

__sjtu_if_lang_valid:nTF 验证语言选项的函数。

```

366 <*thesis>
367 \cs_new_protected:Npn \__sjtu_if_lang_valid:nTF #1
368 { \clist_if_in:NnTF \g__sjtu_lang_clist {#1} }
369 \msg_new:nnn { sjtutex } { lang-validation }
370 { Invalid~ language~ argument~ `#1'! }

```

6.4.2 页面模板

使用 `xtemplate` 构建页面模板,用于绘制标题页与版权页。
页面部件模板。

```

371 \DeclareObjectType { sjtu } { 0 }
372 \DeclareTemplateInterface { sjtu } { component } { 0 }
373 {
374   format      : tokenlist = \c_empty_tl ,
375   content     : tokenlist = \c_empty_tl ,
376   bottom-skip : skip      = \c_zero_skip ,
377   align       : choice { left, right, center, normal } = center
378 }
379 \DeclareTemplateCode { sjtu } { component } { 0 }
380 {
381   format      = \l__sjtu_component_format_tl ,
382   content     = \l__sjtu_component_content_tl ,
383   bottom-skip = \l__sjtu_component_bottom_skip ,
384   align       =
385   {
386     left      =
387       \cs_set_eq:NN \l__sjtu_component_align: \raggedright ,
388     right     =
389       \cs_set_eq:NN \l__sjtu_component_align: \raggedleft ,
390     center    =
391       \cs_set_eq:NN \l__sjtu_component_align: \centering ,
392     normal    =
393       \cs_set_eq:NN \l__sjtu_component_align: \prg_do_nothing:
394   }
395 }
396 {
397   \AssignTemplateKeys
398   \group_begin:
399     \l__sjtu_component_align:
400     \l__sjtu_component_format_tl
401     \l__sjtu_component_content_tl
402   \par
403   \group_end:
404   \l__sjtu_vspace:N \l__sjtu_component_bottom_skip
405 }

```

页面模板。

```

406 \DeclareTemplateInterface { sjtu } { page } { 0 }
407 {
408   bookmark      : boolean = false ,
409   bookmark-text : tokenlist = \c_empty_tl ,
410   style         : tokenlist = empty ,
411   format        : tokenlist = \c_empty_tl ,
412   prefix        : tokenlist ,
413   components    : commalist ,
414   top-skip      : skip      = \c_zero_skip ,
415   bottom-skip   : skip      = \c_zero_skip
416 }
417 \DeclareTemplateCode { sjtu } { page } { 0 }
418 {
419   bookmark      = \l__sjtu_page_bookmark_bool ,
420   bookmark-text = \l__sjtu_page_bookmark_text_tl ,
421   style         = \l__sjtu_page_style_tl ,
422   format        = \l__sjtu_page_format_tl ,
423   prefix        = \l__sjtu_page_prefix_tl ,
424   components    = \l__sjtu_page_components_clist ,
425   top-skip      = \l__sjtu_page_top_skip ,
426   bottom-skip   = \l__sjtu_page_bottom_skip
427 }
428 {
429   \AssignTemplateKeys
430   \bool_if:NTF \g__sjtu_openright_bool

```

```

431     { \cleardoublepage } { \clearpage }
432     \bool_if:NT \l__sjtu_page_bookmark_bool
433     { \__sjtu_pdf_bookmark:nn { 0 } { \l__sjtu_page_bookmark_text_tl } }
434     \exp_args:No \thispagestyle { \l__sjtu_page_style_tl }

```

移除页面顶部 `\vspace*` 的多余空白。见 <https://tex.stackexchange.com/questions/247513>。

```

435     \__sjtu_vspace_r:N \l__sjtu_page_top_skip
436     \__sjtu_vspace:n { - \tex_parskip:D }
437     \__sjtu_vspace:n { - \tex_baselineskip:D }
438     \group_begin:
439         \l__sjtu_page_format_tl
440         \clist_map_inline:Nn \l__sjtu_page_components_clist
441             { \UseInstance { sjtu } { \l__sjtu_page_prefix_tl / ##1 } }
442     \group_end:
443     \__sjtu_vspace:N \l__sjtu_page_bottom_skip
444     \clearpage
445 }

```

辅助函数。

```

446 \cs_new:Npn \__sjtu_declare_component:nnn #1#2#3
447 { \DeclareInstance { sjtu } {#1/#2} { component } {#3} }
448 \cs_new:Npn \__sjtu_declare_page:nn #1#2
449 { \DeclareInstance { sjtu } {#1} { page } {#2} }
450 </thesis>

```

6.5 字号行距

重定义 `\normalsize`, 设置正文的基线间距。

```

\__sjtu_set_font_size:nnNn \normalsize
451 \cs_new_protected:Npn \__sjtu_set_font_size:nnNn #1#2#3#4
452 { \cs_set_protected:Npn #3 { \@setfontsize #3 {#1} {#2} #4 } }
453 \tl_set:Nx \l__sjtu_font_size_tl
454 {
455     { \dim_to_decimal:n { \g__sjtu_font_size_dim } }
456     { \dim_to_decimal:n { \g__sjtu_baseline_skip_dim } }
457 }
458 \bool_if:NT \g__sjtu_fixed_baselineskip_bool
459 {
460     \int_case:nn { \g__sjtu_font_size_int }
461     {
462         { 1 } {
463             \exp_after:wN \__sjtu_set_font_size:nnNn \l__sjtu_font_size_tl
464             \normalsize
465             {
466                 \abovedisplayskip 10\p@ \@plus2\p@ \@minus5\p@
467                 \abovedisplayshortskip \z@ \@plus3\p@
468                 \belowdisplayshortskip 6\p@ \@plus3\p@ \@minus3\p@
469                 \belowdisplayskip \abovedisplayskip
470                 \let\@listi\@listI
471             }
472         }
473         { 2 } {
474             \exp_after:wN \__sjtu_set_font_size:nnNn \l__sjtu_font_size_tl
475             \normalsize
476             {
477                 \abovedisplayskip 12\p@ \@plus3\p@ \@minus7\p@
478                 \abovedisplayshortskip \z@ \@plus3\p@
479                 \belowdisplayshortskip 6.5\p@ \@plus3.5\p@ \@minus3\p@
480                 \belowdisplayskip \abovedisplayskip
481                 \let\@listi\@listI
482             }
483         }
484     }
485     \normalsize
486 }

```


`\setbaselineskip` 设置基线间距, 在字号命令之后使用。

```
487 \NewDocumentCommand \setbaselineskip { m }
488 { \fontsize { \f@size } {#1} \selectfont }
```

6.6 字体配置

`__sjtu_fontset_error:nn` 字库不可用时给出紧急错误信息, 停止读取定义文件。

```
489 \cs_new_protected:Npn \__sjtu_fontset_error:nn #1#2
490 { \msg_error:nnnn { sjtutex } { font-unavailable } {#1} {#2} }
491 \msg_new:nnn { sjtutex } { font-unavailable }
492 { `#1-font~ =~ #2'~ is~ unavailable~ in~ current~ mode. }
```

`__sjtu_fontset_case:nn` 2 个参数依次为 pdfTeX 和 XeTeX/LuaTeX。

```
493 \cs_new_eq:NN \__sjtu_fontset_case:nn \__sjtu_engine_case:nn
```

`__sjtu_fontset_case:nnn` 3 个参数依次为 pdfTeX(生成 PDF)、pdfTeX(生成 DVI)和 XeTeX/LuaTeX。

```
494 \cs_new:Npx \__sjtu_fontset_case:nnn #1#2#3
495 {
496   \__sjtu_engine_case:nn
497   { \sys_if_output_pdf:TF {#1} {#2} }
498   {#3}
499 }
```

```
\__sjtu_declare_math_symbol:nnNn 500 \cs_new_protected:Nn \__sjtu_declare_math_symbol:nnNn
501 {
502   \cs_undefine:N #3
503   \DeclareMathSymbol {#3} {#1} {#2} {#4}
504 }
```

```
\__sjtu_set_slanted_greek: 505 \cs_new_protected:Nn \__sjtu_set_slanted_greek:
506 {
507   \clist_const:Nn \c__sjtu_uppercase_greek_clist
508   { Gamma, Delta, Theta, Lambda, Xi, Pi, Sigma, Upsilon, Phi, Psi, Omega }
509   \clist_map_inline:Nn \c__sjtu_uppercase_greek_clist
510   {
511     \cs_set_eq:cc { up ##1 } { ##1 }
512     \cs_set_eq:cc { it ##1 } { var ##1 }
513   }
514   \bool_if:NT \g__sjtu_slanted_uppercase_greek_bool
515   {
516     \clist_map_inline:Nn \c__sjtu_uppercase_greek_clist
517     { \cs_set_eq:cc { ##1 } { it ##1 } }
518   }
519 }
```

```
\__sjtu_set_unimath_symbol: 520 \cs_new_protected:Nn \__sjtu_set_unimath_symbol:
521 {
522   \clist_map_inline:nn
523   {
524     { increment } { upDelta } ,
525     { QED } { blacksquare }
526   }
527   { \__sjtu_cs_provide_eq:cc ##1 }
528 }
```

如果没有指定数学字体, 则根据西文字体设置匹配的数字字体。

```
529 \tl_if_empty:NT \g__sjtu_math_font_tl
530 { \tl_gset_eq:NN \g__sjtu_math_font_tl \g__sjtu_text_font_tl }
```

根据操作系统判断默认 CJK 字体配置。

```
531 \tl_if_empty:NT \g__sjtu_cjk_font_tl
532 {
533   \sys_if_platform_windows:TF
```

```

534     { \tl_gset:Nn \g__sjtu_cjk_font_tl { windows } }
535     {
536       \ctex_if_platform_macos:TF
537       { \tl_gset:Nn \g__sjtu_cjk_font_tl { mac } }
538       { \tl_gset:Nn \g__sjtu_cjk_font_tl { fandol } }
539     }
540   }

```

`__sjtu_load_font:nn` 如果字体配置文件不存在,则载入默认值,并给出警告。
`__sjtu_load_fontset:`

```

541 \cs_new_protected:Npn \__sjtu_load_font:nn #1#2
542 {
543   \str_if_eq:eeF { \tl_use:c { g__sjtu_ #1 _font_tl } } { none }
544   {
545     \file_if_exist:nF
546     { sjtu- #1 -font- \tl_use:c { g__sjtu_ #1 _font_tl } .def }
547     {
548       \msg_warning:nnnn { sjtutex } { invalid-font } {#1} {#2}
549       \tl_gset:cn { g__sjtu_ #1 _font_tl } {#2}
550     }
551     \ctex_file_input:n
552     { sjtu- #1 -font- \tl_use:c { g__sjtu_ #1 _font_tl } .def }
553   }
554 }
555 \msg_new:nnn { sjtutex } { invalid-font }
556 {
557   Invalid~ value~ `#1-font~ =~ \tl_use:c { g__sjtu_ #1 _font_tl }~ '!\ \\\
558   Using~ `#2'~ instead.
559 }
560 \cs_new_protected:Nn \__sjtu_load_fontset:
561 {
562   \clist_map_inline:nn
563   {
564     { math } { newtx },
565     { text } { newtx },
566     { cjk } { fandol }
567   }
568   { \__sjtu_load_font:nn ##1 }
569 }
570 \@onlypreamble \__sjtu_load_font:nn
571 \@onlypreamble \__sjtu_load_fontset:
572 </class>

```

6.6.1 西文与数学字体

```

573 <*font&(math|text)>
574 <*stixtwo>
575 \__sjtu_fontset_case:nn
576 {
577 <*math>
578   \DeclareSizeFunction { sub } { \sub@sfcnt \@font@info }
579   \PassOptionsToPackage { notext } { stix2 }
580   \RequirePackage { stix2 }
581   \clist_map_inline:nn
582   {
583     \upalpha      { "0B } ,
584     \upbeta       { "0C } ,
585     \upgamma      { "0D } ,
586     \updelta      { "0E } ,
587     \upepsilon    { "0F } ,
588     \upzeta       { "10 } ,
589     \upeta        { "11 } ,
590     \uptheta      { "12 } ,
591     \upiota       { "13 } ,
592     \upkappa      { "14 } ,
593     \uplambda     { "15 } ,
594     \upmu         { "16 } ,

```

```

595     \upnu      { "17 } ,
596     \upxi     { "18 } ,
597     \uppi     { "19 } ,
598     \uprho    { "1A } ,
599     \upsigma  { "1B } ,
600     \uptau    { "1C } ,
601     \upupsilon { "1D } ,
602     \upphi    { "1E } ,
603     \upchi    { "1F } ,
604     \uppsi    { "20 } ,
605     \upomega  { "21 } ,
606     \upvarepsilon { "22 } ,
607     \upvartheta { "23 } ,
608     \upvarpi  { "24 } ,
609     \upvarrho  { "25 } ,
610     \upvarsigma { "26 } ,
611     \upvarphi  { "27 }
612   }
613   { \_sjtu_declare_math_symbol:nnNn { \stix@lcgc } { operators } #1 }
614   \_sjtu_set_slanted_greek:
615 </math>
616 <*text>
617   \tl_set:Nn \encodingdefault { T1 }
618   \DeclareEncodingSubset { TS1 } { ? } { 0 }
619   \UndeclareTextCommand { \textpertenthousand } { T1 }
620   \DeclareTextSymbolDefault { \textpertenthousand } { TS1 }
621   \tl_set:Nn \rmdefault { stix2 }
622   \tl_set:Nn \qhv@scale { 0.94 }
623   \tl_set:Nn \sfdefault { qhv }
624   \tl_set:Nn \ttdefault { qcr }
625 </text>
626 }
627 {
628 <*math>
629   \RequirePackage { unicode-math }
630   \bool_if:NTF \g__sjtu_upright_integral_bool
631     {
632     \setmathfont { STIXTwoMath-Regular.otf }
633     [ StylisticSet = 8 ]
634     }
635     { \setmathfont { STIXTwoMath-Regular.otf } }
636   \setmathfont { STIXTwoMath-Regular.otf }
637   [
638     range = { scr, bfscr },
639     StylisticSet = 1
640   ]
641 </math>
642 <math> \setmathrm
643 <text> \setmainfont
644     { STIXTwoText }
645     [
646     Extension = .otf,
647     UprightFont = *-Regular,
648     BoldFont = *-Bold,
649     ItalicFont = *-Italic,
650     BoldItalicFont = *-BoldItalic
651     ]
652 </stixtwo>
653 <*xits>
654 \_sjtu_fontset_case:nn
655 <math> { \_sjtu_fontset_error:nn { math } { xits } }
656 <text> { \_sjtu_fontset_error:nn { text } { xits } }
657 {
658 <*math>
659   \RequirePackage { unicode-math }
660   \bool_if:NTF \g__sjtu_upright_integral_bool
661     {

```

```

662     \setmathfont { XITSMath-Regular }
663     [
664         Extension    = .otf,
665         BoldFont     = XITSMath-Bold,
666         StylisticSet = 8
667     ]
668 }
669 {
670     \setmathfont { XITSMath-Regular }
671     [
672         Extension    = .otf,
673         BoldFont     = XITSMath-Bold,
674     ]
675 }
676 \setmathfont { XITSMath-Regular.otf }
677 [
678     range          = { cal, bfcalf },
679     StylisticSet = 1
680 ]
681 </math>
<math> 682     \setmathrm
<text> 683     \setmainfont
684     { XITS }
685     [
686         Extension    = .otf,
687         UprightFont  = *-Regular,
688         BoldFont     = *-Bold,
689         ItalicFont   = *-Italic,
690         BoldItalicFont = *-BoldItalic
691     ]
692 </xits>
693 <*newtx|newpx>
694 <*math>
695 \tl_set_eq:NN \l__sjtu_save_encodingdefault_tl \encodingdefault
696 \tl_set_eq:NN \l__sjtu_save_rmdefault_tl \rmdefault
697 \tl_set_eq:NN \l__sjtu_save_sfdefault_tl \sfdefault
698 \tl_set_eq:NN \l__sjtu_save_ttdefault_tl \ttdefault
699 \tl_set:Nn \encodingdefault { OT1 }
<newtx> 700 \tl_set:Nn \rmdefault { ntxtlf }
<newpx> 701 \tl_set:Nn \rmdefault { zplTLF }
702 \tl_set:Nn \qhv@scale { 0.94 }
703 \tl_set:Nn \sfdefault { qhv }
704 \tl_set:Nn \ttdefault { qcr }
<newtx> 705 \RequirePackage { newtxmath }
<newpx> 706 \RequirePackage { newpxmath }
707 \tl_set_eq:NN \encodingdefault \l__sjtu_save_encodingdefault_tl
708 \tl_set_eq:NN \rmdefault \l__sjtu_save_rmdefault_tl
709 \tl_set_eq:NN \sfdefault \l__sjtu_save_sfdefault_tl
710 \tl_set_eq:NN \ttdefault \l__sjtu_save_ttdefault_tl
711 \__sjtu_set_unimath_symbol:
712 </math>
713 <*text>
714 \__sjtu_fontset_case:nn
715 {
716     \tl_set:Nn \encodingdefault { T1 }
<newtx> 717 \RequirePackage { newtxtext }
<newpx> 718 \RequirePackage { newpxtext }
719 \tl_set:Nn \ttdefault { qcr }
720 }
721 {
722     \setmainfont
<newtx> 723     { TeXGyreTermesX }
<newpx> 724     { TeXGyrePagellaX }
725     [
726         Extension    = .otf,
727         UprightFont  = *-Regular,
728         BoldFont     = *-Bold,

```

```

729     ItalicFont      = *-Italic,
730     BoldItalicFont = *-BoldItalic
731   ]
732 </text>
733 </newtx|newpx>
734 <*text&(newtx|newpx)|stixtwo|xits>
<math> 735     \setmathsf
<text> 736     \setsansfont
737     { texgyreheros }
738     [
739     Extension      = .otf,
740     UprightFont    = *-regular,
741     BoldFont       = *-bold,
742     ItalicFont     = *-italic,
743     BoldItalicFont = *-bolditalic,
744     Scale          = 0.94,
745     ]
<math> 746     \setmathhtt
<text> 747     \setmonofont
748     { texgyrecursor }
749     [
750     Extension      = .otf,
751     UprightFont    = *-regular,
752     BoldFont       = *-bold,
753     ItalicFont     = *-italic,
754     BoldItalicFont = *-bolditalic,
755     Ligatures      = CommonOff
756     ]
757   }
758 </text&(newtx|newpx)|stixtwo|xits>
759 <*lm>
760 <*text>
761 \_sjtu_fontset_case:nn
762 {
763   \tl_set:Nn \encodingdefault { T1 }
764   \tl_set:Nn \rmdefault { lmr }
765   \tl_set:Nn \sfdefault { lmss }
766   \tl_set:Nn \ttdefault { lmtt }
767 } { }
768 </text>
769 <*math>
770 \RequirePackage { amssymb, upgreek }
771 \SetSymbolFont { operators } { normal } { OT1 } { lmr } { m } { n }
772 \SetSymbolFont { letters } { normal } { OML } { lmm } { m } { it }
773 \SetSymbolFont { symbols } { normal } { OMS } { lmsy } { m } { n }
774 \SetSymbolFont { largesymbols } { normal } { OMX } { lmex } { m } { n }
775 \SetSymbolFont { operators } { bold } { OT1 } { lmr } { bx } { n }
776 \SetSymbolFont { letters } { bold } { OML } { lmm } { b } { it }
777 \SetSymbolFont { symbols } { bold } { OMS } { lmsy } { b } { n }
778 \SetSymbolFont { largesymbols } { bold } { OMX } { lmex } { m } { n }
779 \SetMathAlphabet { \mathbf } { normal } { OT1 } { lmr } { bx } { n }
780 \SetMathAlphabet { \mathsf } { normal } { OT1 } { lmss } { m } { n }
781 \SetMathAlphabet { \mathit } { normal } { OT1 } { lmr } { m } { it }
782 \SetMathAlphabet { \mathtt } { normal } { OT1 } { lmtt } { m } { n }
783 \SetMathAlphabet { \mathbf } { bold } { OT1 } { lmr } { bx } { n }
784 \SetMathAlphabet { \mathsf } { bold } { OT1 } { lmss } { m } { n }
785 \SetMathAlphabet { \mathit } { bold } { OT1 } { lmr } { bx } { it }
786 \SetMathAlphabet { \mathtt } { bold } { OT1 } { lmtt } { m } { n }
787 \bool_if:NT \g__sjtu_upright_integral_bool
788 { \RequirePackage { cmupint } }
789 \_sjtu_set_slanted_greek:
790 \_sjtu_set_unimath_symbol:
791 </math>
792 </lm>
793 <*libertinus>
794 \_sjtu_fontset_case:nn
795 {

```

```

796 <*text>
797   \tl_set:Nn \encodingdefault { T1 }
798   \tl_set:Nn \rmdefault { LibertinusSerif-TLF }
799   \tl_set:Nn \sfdefault { LibertinusSans-TLF }
800   \tl_set:Nn \ttdefault { lmtt }
801 </text>
802 <*math>
803   \exp_args:No \PassOptionsToPackage
804     { \g__sjtu_math_font_options_clist } { libertinust1math }
805   \RequirePackage { libertinust1math }
806 </math>
807 }
808 {
809 <*math>
810   \RequirePackage { unicode-math }
811   \bool_if:NTF \g__sjtu_upright_integral_bool
812     { \setmathfont { LibertinusMath-Regular.otf } }
813     {
814       \setmathfont { LibertinusMath-Regular.otf }
815       [ StylisticSet = 8 ]
816     }
817   \setmathfont { latinmodern-math.otf } [ range = \checkmark ]
818 </math>
<math> 819   \setmathrm
<text> 820   \setmainfont
821     { LibertinusSerif }
822     [
823       Extension           = .otf,
824       UprightFont         = *-Regular,
825       BoldFont            = *-Bold,
826       ItalicFont          = *-Italic,
827       BoldItalicFont      = *-BoldItalic,
828       SlantedFont         = *-Regular,
829       BoldSlantedFont     = *-Bold,
830       SlantedFeatures     = { FakeSlant = 0.2 },
831       BoldSlantedFeatures = { FakeSlant = 0.2 }
832     ]
<math> 833   \setmathsf
<text> 834   \setsansfont
835     { LibertinusSans }
836     [
837       Extension           = .otf,
838       UprightFont         = *-Regular,
839       BoldFont            = *-Bold,
840       ItalicFont          = *-Italic,
841       BoldItalicFont      = *-Italic,
842       BoldItalicFeatures  = { FakeBold = 3 },
843       SlantedFont         = *-Regular,
844       BoldSlantedFont     = *-Bold,
845       SlantedFeatures     = { FakeSlant = 0.2 },
846       BoldSlantedFeatures = { FakeSlant = 0.2 }
847     ]
848   }
849 </libertinus>
850 <*times>
851 <*math>
852 \PassOptionsToPackage { Symbol } { upgreek }
853 \RequirePackage { amssymb, upgreek }
854 \tl_set_eq:NN \l__sjtu_save_rmdefault_tl \rmdefault
855 \RequirePackage { mathptmx }
856 \tl_set_eq:NN \rmdefault \l__sjtu_save_rmdefault_tl
857 \tl_set:Nn \Hv@scale { 0.94 }
858 \DeclareMathAlphabet { \mathsf } { OT1 } { phv } { m } { n }
859 \DeclareMathAlphabet { \mathtt } { OT1 } { pcr } { m } { n }
860 \SetMathAlphabet { \mathsf } { bold } { OT1 } { phv } { b } { n }
861 \SetMathAlphabet { \mathtt } { bold } { OT1 } { pcr } { b } { n }
862 \DeclareSymbolFont { SJTU@optm } { OML } { ptmcm } { m } { it }

```

```

863 \_sjtu_declare_math_symbol:nnNn { \mathord } { SJTU@ptm } \upvarsigma { "26 }
864 \bool_if:NT \g__sjtu_upright_integral_bool
865   { \RequirePackage { cmupint } }
866 \_sjtu_set_unimath_symbol:
867 </math>
868 <*text>
869 \_sjtu_fontset_case:nn
870   {
871     \tl_set:Nn \encodingdefault { T1 }
872     \tl_set:Nn \rmdefault { ptm }
873     \tl_set:Nn \Hv@scale { 0.94 }
874     \tl_set:Nn \sfdefault { phv }
875     \tl_set:Nn \ttdefault { pcr }
876   }
877   {
878     \setmainfont { Times~New~Roman } [ Ligatures = Rare ]
879     \setsansfont { Arial } [ Scale = 0.94 ]
880     \setmonofont { Courier~New }
881   }
882 </text>
883 </times>
884 <*newcm>
885 \_sjtu_fontset_case:nn
886 <math> { \_sjtu_fontset_error:nn { math } { newcm } }
887 <text> { \_sjtu_fontset_error:nn { text } { newcm } }
888   {
889 <*math>
890     \RequirePackage { unicode-math }
891     \bool_if:NTF \g__sjtu_upright_integral_bool
892       {
893         \setmathfont { NewCMMath-Book.otf }
894           [ StylisticSet = 2 ]
895       }
896       { \setmathfont { NewCMMath-Book.otf } }
897     \setmathfont { NewCMMath-Book.otf }
898       [
899         range          = { scr, bfscr },
900         StylisticSet = 1
901       ]
902 </math>
903 <math> \setmathrm
904 <text> \setmainfont
905   { NewCM10 }
906   [
907     Extension      = .otf,
908     SizeFeatures =
909     {
910       {
911         Size          = -9,
912         Font          = NewCM08-Book,
913         ItalicFont    = NewCM08-BookItalic,
914         SlantedFont   = NewCM08-Book,
915       },
916       { Size          = 9- }
917     },
918     UprightFont      = *-Book,
919     BoldFont         = *-Bold,
920     ItalicFont       = *-BookItalic,
921     BoldItalicFont   = *-BoldItalic,
922     SlantedFont      = *-Book,
923     BoldSlantedFont  = *-Bold,
924     SlantedFeatures  = { FakeSlant = 0.25 },
925     BoldSlantedFeatures = { FakeSlant = 0.25 }
926   ]
927 <math> \setmathsf
928 <text> \setsansfont
929   { NewCMSans10 }

```

```

930     [
931     Extension      = .otf,
932     SizeFeatures =
933     {
934     {
935     Size          = -9,
936     Font          = NewCMSans08-Book,
937     ItalicFont    = NewCMSans08-BookOblique,
938     },
939     { Size        = 9- }
940     },
941     UprightFont    = *-Book,
942     BoldFont       = *-Bold,
943     ItalicFont     = *-BookOblique,
944     BoldItalicFont = *-BoldOblique
945     ]
946 \setmathtt
947 \setmonofont
948   { NewCMMono10 }
949   [
950     Extension      = .otf,
951     UprightFont    = *-Book,
952     BoldFont       = *-Bold,
953     ItalicFont     = *-BookItalic,
954     BoldItalicFont = *-BoldOblique,
955     SlantedFont    = *-Book,
956     SlantedFeatures = { FakeSlant = 0.25 },
957     BoldSlantedFont = *-Bold,
958     BoldSlantedFeatures = { FakeSlant = 0.25 }
959   ]
960 }
961 </newcm>
962 < *cambria>
963 \_sjtu_fontset_case:nn
964 { \_sjtu_fontset_error:nn { math } { cambria } }
965 { \_sjtu_fontset_error:nn { text } { cambria } }
966 {
967 < *math>
968   \RequirePackage { unicode-math }
969   \setmathfont { Cambria~Math }
970   \setmathrm { Cambria }
971   \setmathsf { Calibri }
972   \setmathtt { Consolas } [ Scale = 0.95 ]
973 </math>
974 < *text>
975   \setmainfont { Cambria }
976   \setsansfont { Calibri }
977   \setmonofont { Consolas } [ Scale = 0.95 ]
978 </text>
979 }
980 </cambria>
981 </font&{math|text}>

```

unicode-math 宏包设置。

```

982 < *class>
983 \ctex_at_end_package:nn { unicode-math }
984 {
985   \DeclareDocumentCommand \bm { m }
986     { { \sympbf {#1} } }
987   \DeclareDocumentCommand \boldsymbol { m }
988     { { \sympbf {#1} } }
989   \bool_if:NTF \g__sjtu_slanted_uppercase_greek_bool
990     { \keys_set:nn { unicode-math } { math-style = ISO } }
991     { \keys_set:nn { unicode-math } { math-style = TeX } }
992   \bool_if:NTF \g__sjtu_integral_limits_bool
993     { \removenolimits } { \addnolimits }
994   {

```



```

995     \int\iint\iiint\iiiiint\oint\oiint\oiint
996     \intclockwise\varointclockwise\ointctrlockwise\sumint
997     \intbar\intBar\find\cirfnint\awint\rppoint
998     \scpolint\mpolint\pointint\sqint\intlarhk\intx
999     \intcap\intcup\upint\lowint
1000   }
1001 }

```

若未使用 `unicode-math` 配置数学字体, 则自动调用 `bm`。

```

1002 \ctex_at_end_preamble:n
1003 {
1004   \@ifpackageloaded { unicode-math }
1005   { } { \RequirePackage { bm } }
1006 }
1007 </class>

```

6.6.2 CJK 字体

在字体未提供对应粗体的情况下, 允许使用伪粗。

```

1008 <*font&cjk>
1009 <*windows>
1010 <*und>
1011 \tl_if_eq:NNTF \g__sjtu_lang_tl \c__sjtu_lang_ja_tl
1012   { \ctex_file_input:n { sjtu-cjk-font-windows-ja.def } }
1013   { \ctex_file_input:n { sjtu-cjk-font-windows-zh.def } }
1014 </und>
1015 <*zhja>
1016 \__sjtu_fontset_case:nn
1017 <*zh>
1018 {
1019   \ctex_load_zhmap:nnnn { zhsong } { zhhei } { zhfs } { windows }
1020   \ctex_punct_set:n { windows }
1021   \ctex_punct_map_family:nn { \CJKrmdefault } { zhsong }
1022   \ctex_punct_map_bfseries:nn { \CJKrmdefault } { zhhei }
1023   \ctex_punct_map_itshape:nn { \CJKrmdefault } { zhkai }
1024 }
1025 </zh>
<ja> 1026 { \__sjtu_fontset_error:nn { cjk } { windows } }
1027 {
1028 <*zh>
1029   \setCJKmainfont { SimSun }
1030   [ AutoFakeBold = 3 , ItalicFont = KaiTi ]
1031   \setCJKsansfont { SimHei } [ AutoFakeBold = 3 ]
1032   \setCJKmonofont { FangSong }
1033 </zh>
1034 <*ja>
1035   \setCJKmainfont { MS~Mincho } [ AutoFakeBold = 3 ]
1036   \setCJKsansfont { MS~Gothic } [ AutoFakeBold = 3 ]
1037   \setCJKmonofont { MS~Mincho }
1038   \setCJKfamilyfont { jamin } { MS~Mincho } [ AutoFakeBold = 3 ]
1039   \setCJKfamilyfont { jagoth } { MS~Gothic } [ AutoFakeBold = 3 ]
1040 </ja>
1041   \setCJKfamilyfont { zhsong } { SimSun }
1042   [ AutoFakeBold = 3 , ItalicFont = KaiTi ]
1043   \setCJKfamilyfont { zhhei } { SimHei } [ AutoFakeBold = 3 ]
1044   \setCJKfamilyfont { zhkai } { KaiTi }
1045   \setCJKfamilyfont { zhfs } { FangSong }
1046 }
1047 </zhja>
1048 </windows>
1049 <*mac>
1050 <*und>
1051 \tl_if_eq:NNTF \g__sjtu_lang_tl \c__sjtu_lang_ja_tl
1052   { \ctex_file_input:n { sjtu-cjk-font-mac-ja.def } }
1053   { \ctex_file_input:n { sjtu-cjk-font-mac-zh.def } }
1054 </und>
1055 <*zhja>

```

```

<zh> 1056 \_sjtu_fontset_case:nnn
<ja> 1057 \_sjtu_fontset_case:nn
1058 { \_sjtu_fontset_error:nn { cjk } { mac } }
1059 <*zh>
1060 {
1061   \ctex_load_zhmap:nnnn { zhsong } { zhhei } { zhfs } { mac }
1062   \ctex_punct_set:n { mac }
1063   \ctex_punct_map_family:nn { \CJKrmddefault } { zhsong }
1064   \ctex_punct_map_family:nn { \CJKsfdefault } { zhpf }
1065   \ctex_punct_map_bfseries:nn { \CJKrmddefault } { zhpf }
1066   \ctex_punct_map_itshape:nn { \CJKrmddefault } { zhkai }
1067 }
1068 </zh>
1069 {
1070 <*zh>
1071   \setCJKmainfont { Songti~SC }
1072   [
1073     UprightFont = *~Light ,
1074     BoldFont    = *~Bold ,
1075     ItalicFont  = Kaiti~SC~Regular ,
1076     BoldItalicFont = Kaiti~SC~Bold
1077   ]
1078   \setCJKsansfont { Heiti~SC }
1079   [
1080     UprightFont = *~Medium ,
1081     AutoFakeBold = 3
1082   ]
1083   \setCJKmonofont { STFangsong }
1084 </zh>
1085 <*ja>
1086   \setCJKmainfont { HiraMinProN }
1087   [
1088     UprightFont = *-W3 ,
1089     BoldFont    = *-W6
1090   ]
1091   \setCJKsansfont { HiraKakuProN }
1092   [
1093     UprightFont = *-W3 ,
1094     BoldFont    = *-W6
1095   ]
1096   \setCJKmonofont { HiraMinProN-W3 }
1097   \setCJKfamilyfont { jamin } { HiraMinProN }
1098   [
1099     UprightFont = *-W3 ,
1100     BoldFont    = *-W6
1101   ]
1102   \setCJKfamilyfont { jagoth } { HiraKakuProN }
1103   [
1104     UprightFont = *-W3 ,
1105     BoldFont    = *-W6
1106   ]
1107 </ja>
1108   \setCJKfamilyfont { zhsong } { Songti~SC }
1109   [
1110     UprightFont = *~Light ,
1111     BoldFont    = *~Bold ,
1112     ItalicFont  = Kaiti~SC~Regular ,
1113     BoldItalicFont = Kaiti~SC~Bold
1114   ]
1115   \setCJKfamilyfont { zhhei } { Heiti~SC }
1116   [
1117     UprightFont = *~Medium ,
1118     AutoFakeBold = 3
1119   ]
1120   \setCJKfamilyfont { zhfs } { STFangsong }
1121   \setCJKfamilyfont { zhkai } { Kaiti~SC }
1122   [

```

```

1123     UprightFont    = *~Regular ,
1124     BoldFont      = *~Bold
1125 ]
1126 }
1127 </zh|ja>
1128 </mac>
1129 <*ubuntu>
1130 <*und>
1131 \tl_if_eq:NNTF \g__sjtu_lang_tl \c__sjtu_lang_ja_tl
1132 { \ctex_file_input:n { sjtu-cjk-font-ubuntu-ja.def } }
1133 { \ctex_file_input:n { sjtu-cjk-font-ubuntu-zh.def } }
1134 </und>
1135 <*zh|ja>
<zh> 1136 \__sjtu_fontset_case:nnn
<ja> 1137 \__sjtu_fontset_case:nn
1138 { \__sjtu_fontset_error:nn { cjk } { ubuntu } }
1139 <*zh>
1140 {
1141   \ctex_load_zhmap:nnnn { zhsong } { zhhei } { zhsong } { ubuntu }
1142   \ctex_punct_set:n { ubuntu }
1143   \ctex_punct_map_family:nn { \CJKrmdefault } { zhsong }
1144   \ctex_punct_map_bfseries:nn { \CJKrmdefault } { zhhei }
1145   \ctex_punct_map_itshape:nn { \CJKrmdefault } { zhkai }
1146 }
1147 </zh>
1148 {
1149 <*zh>
1150   \setCJKmainfont { Noto~Serif~CJK~SC }
1151   [
1152     UprightFont = *~Light ,
1153     BoldFont    = *~Bold ,
1154     ItalicFont  = AR~PL~KaitiM~GB
1155   ]
1156   \setCJKsansfont { Noto~Sans~CJK~SC }
1157   [
1158     UprightFont = *~Medium ,
1159     BoldFont    = *~Bold
1160   ]
1161   \setCJKmonofont { Noto~Serif~CJK~SC }
1162   [
1163     UprightFont = *~Light ,
1164     BoldFont    = *~Bold
1165   ]
1166 </zh>
1167 <*ja>
1168   \setCJKmainfont { Noto~Serif~CJK~JP }
1169   [
1170     UprightFont = *~Light ,
1171     BoldFont    = *~Bold
1172   ]
1173   \setCJKsansfont { Noto~Sans~CJK~JP }
1174   [
1175     UprightFont = *~Medium ,
1176     BoldFont    = *~Bold
1177   ]
1178   \setCJKmonofont { Noto~Serif~CJK~JP }
1179   [
1180     UprightFont = *~Light ,
1181     BoldFont    = *~Bold
1182   ]
1183   \setCJKfamilyfont { jamin } { Noto~Serif~CJK~JP }
1184   [
1185     UprightFont = *~Light ,
1186     BoldFont    = *~Bold
1187   ]
1188   \setCJKfamilyfont { jagoth } { Noto~Sans~CJK~JP }
1189   [

```

```

1190     UprightFont = *~Medium ,
1191     BoldFont    = *~Bold
1192 ]
1193 <ja>
1194 \setCJKfamilyfont { zhsong } { Noto~Serif~CJK~SC    }
1195 [
1196     UprightFont = *~Light ,
1197     BoldFont    = *~Bold ,
1198     ItalicFont  = AR~PL~KaitiM~GB
1199 ]
1200 \setCJKfamilyfont { zhhei } { Noto~Sans~CJK~SC    }
1201 [
1202     UprightFont = *~Medium ,
1203     BoldFont    = *~Bold
1204 ]
1205 \setCJKfamilyfont { zhfs  } { Noto~Sans~Mono~CJK~JP }
1206 \setCJKfamilyfont { zhkai } { AR~PL~KaitiM~GB    }
1207 }
1208 </zhja>
1209 </ubuntu>
1210 <*adobe>
1211 <*und>
1212 \tl_if_eq:NNTF \g__sjtu_lang_tl \c__sjtu_lang_ja_tl
1213   { \ctex_file_input:n { sjtu-cjk-font-adobe-ja.def } }
1214   { \ctex_file_input:n { sjtu-cjk-font-adobe-zh.def } }
1215 </und>
1216 <*zhja>
<zh> 1217 \__sjtu_fontset_case:nnn
<ja> 1218 \__sjtu_fontset_case:nn
1219   { \__sjtu_fontset_error:nn { cjk } { adobe } }
1220 <*zh>
1221   {
1222     \ctex_load_zhmap:nnnn { zhsong } { zhhei } { zhfs } { adobe }
1223     \ctex_punct_set:n { adobe }
1224     \ctex_punct_map_family:nn { \CJKrmdefault } { zhsong }
1225     \ctex_punct_map_bfseries:nn { \CJKrmdefault } { zhhei }
1226     \ctex_punct_map_itshape:nn { \CJKrmdefault } { zhkai }
1227   }
1228 </zh>
1229   {
1230 <*zh>
1231     \setCJKmainfont { AdobeSongStd-Light          }
1232     [ AutoFakeBold = 3 , ItalicFont = AdobeKaitiStd-Regular ]
1233     \setCJKsansfont { AdobeHeitiStd-Regular      } [ AutoFakeBold = 3 ]
1234     \setCJKmonofont { AdobeFangsongStd-Regular  }
1235 </zh>
1236 <*ja>
1237     \setCJKmainfont { KozMinPr6N }
1238     [
1239         UprightFont = *-Light ,
1240         BoldFont    = *-Bold
1241     ]
1242     \setCJKsansfont { KozGoPr6N }
1243     [
1244         UprightFont = *-Medium ,
1245         BoldFont    = *-Bold
1246     ]
1247     \setCJKmonofont { KozMinPr6N-Light }
1248     \setCJKfamilyfont { jamin } { KozMinPr6N }
1249     [
1250         UprightFont = *-Light ,
1251         BoldFont    = *-Bold
1252     ]
1253     \setCJKfamilyfont { jagoth } { KozGoPr6N }
1254     [
1255         UprightFont = *-Medium ,
1256         BoldFont    = *-Bold

```

```

1257     ]
1258 </ja>
1259     \setCJKfamilyfont { zhsong } { AdobeSongStd-Light      }
1260     [ AutoFakeBold = 3 , ItalicFont = AdobeKaitiStd-Regular ]
1261     \setCJKfamilyfont { zhhei } { AdobeHeitiStd-Regular   } [ AutoFakeBold = 3 ]
1262     \setCJKfamilyfont { zhfs  } { AdobeFangsongStd-Regular }
1263     \setCJKfamilyfont { zhkai } { AdobeKaitiStd-Regular   }
1264   }
1265 </zhja>
1266 </adobe>
1267 <*fandol>
1268 <*und>
1269 \tl_if_eq:NNTF \g__sjtu_lang_tl \c__sjtu_lang_ja_tl
1270 { \ctex_file_input:n { sjtu-cjk-font-fandol-ja.def } }
1271 { \ctex_file_input:n { sjtu-cjk-font-fandol-zh.def } }
1272 </und>
1273 <*zhja>
<zh> 1274 \__sjtu_fontset_case:nnn
<ja> 1275 \__sjtu_fontset_case:nn
1276   { \__sjtu_fontset_error:nn { cjk } { fandol } }
1277 <*zh>
1278   {
1279     \ctex_load_zhmap:nnnn { zhsong } { zhhei } { zhfs } { fandol }
1280     \ctex_punct_set:n { fandol }
1281     \ctex_punct_map_family:nn { \CJKrmdefault } { zhsong }
1282     \ctex_punct_map_bfseries:nn { \CJKrmdefault } { zhhei }
1283     \ctex_punct_map_itshape:nn { \CJKrmdefault } { zhkai }
1284   }
1285 </zh>
1286   {
1287 <*zh>
1288     \setCJKmainfont { FandolSong }
1289     [
1290       Extension = .otf ,
1291       UprightFont = *-Regular ,
1292       BoldFont = *-Bold ,
1293       ItalicFont = FandolKai-Regular
1294     ]
1295     \setCJKsansfont { FandolHei }
1296     [
1297       Extension = .otf ,
1298       UprightFont = *-Regular ,
1299       BoldFont = *-Bold
1300     ]
1301     \setCJKmonofont { FandolFang }
1302     [
1303       Extension = .otf ,
1304       UprightFont = *-Regular
1305     ]
1306 </zh>
1307 <*ja>
1308     \setCJKmainfont { HaranoAjiMincho }
1309     [
1310       Extension = .otf ,
1311       UprightFont = *-Regular ,
1312       BoldFont = *-Bold
1313     ]
1314     \setCJKsansfont { HaranoAjiGothic }
1315     [
1316       Extension = .otf ,
1317       UprightFont = *-Medium ,
1318       BoldFont = *-Bold
1319     ]
1320     \setCJKmonofont { HaranoAjiGothic }
1321     [
1322       Extension = .otf ,
1323       UprightFont = *-Regular

```

```

1324 ]
1325 \setCJKfamilyfont { jamin } { HaranoAjiMincho }
1326 [
1327   Extension = .otf ,
1328   UprightFont = *-Regular ,
1329   BoldFont = *-Bold
1330 ]
1331 \setCJKfamilyfont { jagoth } { HaranoAjiGothic }
1332 [
1333   Extension = .otf ,
1334   UprightFont = *-Medium ,
1335   BoldFont = *-Bold
1336 ]
1337 <ja>
1338 \setCJKfamilyfont { zhsong } { FandolSong }
1339 [
1340   Extension = .otf ,
1341   UprightFont = *-Regular ,
1342   BoldFont = *-Bold ,
1343   ItalicFont = FandolKai-Regular
1344 ]
1345 \setCJKfamilyfont { zhhei } { FandolHei }
1346 [
1347   Extension = .otf ,
1348   UprightFont = *-Regular,
1349   BoldFont = *-Bold
1350 ]
1351 \setCJKfamilyfont { zhfs } { FandolFang }
1352 [
1353   Extension = .otf ,
1354   UprightFont = *-Regular
1355 ]
1356 \setCJKfamilyfont { zhkai } { FandolKai }
1357 [
1358   Extension = .otf ,
1359   UprightFont = *-Regular
1360 ]
1361 }
1362 </zhja>
1363 </fandol>
1364 <*founder>
1365 <*und>
1366 \tl_if_eq:NNTF \g__sjtu_lang_tl \c__sjtu_lang_ja_tl
1367 { \ctex_file_input:n { sjtu-cjk-font-founder-ja.def } }
1368 { \ctex_file_input:n { sjtu-cjk-font-founder-zh.def } }
1369 </und>
1370 <*zhja>
1371 \__sjtu_fontset_case:nn
1372 <*zh>
1373 {
1374   \ctex_load_zhmap:nnnn { zhsong } { zhhei } { zhfs } { founder }
1375   \ctex_punct_set:n { founder }
1376   \ctex_punct_map_family:nn { \CJKrmdefault } { zhsong }
1377   \ctex_punct_map_bfseries:nn { \CJKrmdefault } { zhhei }
1378   \ctex_punct_map_itshape:nn { \CJKrmdefault } { zhkai }
1379 }
1380 </zh>
<ja> 1381 { \__sjtu_fontset_error:nn { cjk } { founder } }
1382 {
1383 <*zh>
1384   \setCJKmainfont { FZShuSong-Z01 }
1385   [ AutoFakeBold = 3 , ItalicFont = FZKai-Z03 ]
1386   \setCJKsansfont { FZHei-B01 } [ AutoFakeBold = 3 ]
1387   \setCJKmonofont { FZFangSong-Z02 }
1388 </zh>
1389 <*ja>
1390   \setCJKmainfont { ipam.ttf } [ AutoFakeBold = 3 ]

```

```

1391 \setCJKsansfont { ipag.ttf } [ AutoFakeBold = 3 ]
1392 \setCJKmonofont { ipag.ttf }
1393 \setCJKfamilyfont { jamin } { ipam.ttf } [ AutoFakeBold = 3 ]
1394 \setCJKfamilyfont { jagoth } { ipag.ttf } [ AutoFakeBold = 3 ]
1395 <ja>
1396 \setCJKfamilyfont { zhsong } { FZShuSong-Z01 }
1397 [ AutoFakeBold = 3 , ItalicFont = FZKai-Z03 ]
1398 \setCJKfamilyfont { zhhei } { FZHei-B01 } [ AutoFakeBold = 3 ]
1399 \setCJKfamilyfont { zhkai } { FZKai-Z03 }
1400 \setCJKfamilyfont { zhfs } { FZFangSong-Z02 }
1401 }
1402 </zhja>
1403 </founder>
1404 <!*und>
1405 \NewDocumentCommand \songti { } { \CJKfamily { zhsong } }
1406 \NewDocumentCommand \heiti { } { \CJKfamily { zhhei } }
<lubuntu> 1407 \NewDocumentCommand \fangsong { } { \CJKfamily { zhfs } }
1408 \NewDocumentCommand \kaishu { } { \CJKfamily { zhkai } }
<ja> 1409 \NewDocumentCommand \mincho { } { \CJKfamily { jamin } }
<ja> 1410 \NewDocumentCommand \gothic { } { \CJKfamily { jagoth } }
1411 </!und>
1412 </font&cjk>

```

\CJKrmfamily 只改变 CJK 字体族的命令。

```

\CJKsffamily
\CJKttfamily
1413 <*class>
1414 \NewDocumentCommand \CJKrmfamily { } { \CJKfamily { \CJKrmddefault } }
1415 \NewDocumentCommand \CJKsffamily { } { \CJKfamily { \CJKsfdefault } }
1416 \NewDocumentCommand \CJKttfamily { } { \CJKfamily { \CJKttdefault } }

```

带圈数字使用 CJK 字体。

```

1417 \_sjtu_unicode_engine_case:nn
1418 {
1419 \xeCJK_declare_char_class:nn { CJK }
1420 { "24EA, "2460->"2473, "3251->"32BF, "25A1 }
1421 }
1422 {
1423 \ltjdefcharrange { 99 }
1424 { "24EA, "2460-"2473, "3251-"32BF, "25A1 }
1425 \ltjsetparameter { jacharrange = { +99 } }
1426 }

```

载入字体配置。

```

1427 \_sjtu_load_fontset:

```

6.7 名称设置

定义 sjtu/name 键值类。

设置标准文档类中已定义的名称。

```

1428 \keys_define:nn { sjtu / name }
1429 {
1430 contents .meta:nn = { ctex } { contentsname = {#1} } ,
1431 listfigure .meta:nn = { ctex } { listfigurename = {#1} } ,
1432 listtable .meta:nn = { ctex } { listtablename = {#1} } ,
1433 figure .meta:nn = { ctex } { figurename = {#1} } ,
1434 table .meta:nn = { ctex } { tablename = {#1} } ,
<lthesis> 1435 abstract .meta:nn = { ctex } { abstractname = {#1} } ,
1436 index .meta:nn = { ctex } { indexname = {#1} } ,
1437 appendix .meta:nn = { ctex } { appendixname = {#1} } ,
1438 proof .meta:nn = { ctex } { proofname = {#1} } ,
1439 bib .meta:nn = { ctex } { bibname = {#1} } ,
1440 part .tl_set:N = \partname ,
<larticle> 1441 chapter .tl_set:N = \chaptername ,

```

标准文档类中未定义的名称。

```

1442 figure*      .tl_set:N = \SJTU@figurename@bi@second ,
1443 figure*      .initial:n = { 图 } ,
1444 table*       .tl_set:N = \SJTU@tablename@bi@second ,
1445 table*       .initial:n = { 表 } ,
1446 algorithm    .tl_set:N = \SJTU@algorithmname ,
1447 algorithm    .initial:n = { Algorithm } ,
1448 listalgorithm .tl_set:N = \SJTU@listalgorithmname ,
1449 listalgorithm .initial:n = { List~of~Algorithms } ,
1450 <*thesis>
1451 abbr         .tl_set:N = \SJTU@abbrname ,
1452 abbr         .initial:n = { Abbreviations } ,
1453 nom          .tl_set:N = \SJTU@nomname ,
1454 nom          .initial:n = { Nomenclature } ,
1455 ack         .tl_set:N = \SJTU@ackname ,
1456 ack         .initial:n = { Acknowledgements } ,
1457 resume      .tl_set:N = \SJTU@resumename ,
1458 resume      .initial:n = { Resume } ,
1459 digest      .tl_set:N = \SJTU@digestname ,
1460 digest      .initial:n = { Digest } ,
1461 achv        .tl_set:N = \SJTU@achvname ,
1462 achv        .initial:n = { List~of~Research~Achievements } ,
1463 </thesis>
1464 }
1465 </class>

1466 <*scheme>
1467 <*zh>
1468 \keys_set_known:nn { sjtu / name }
1469 {
1470 contents     = { 目 \protect \quad 录 } ,
1471 listfigure   = { 插 \protect \quad 图 } ,
1472 listtable    = { 表 \protect \quad 格 } ,
1473 figure       = { 图 } ,
1474 table        = { 表 } ,
1475 abstract     = { 摘 \protect \quad 要 } ,
1476 index        = { 索 \protect \quad 引 } ,
1477 appendix     = { 附录 } ,
1478 proof        = { 证明 } ,
1479 bib          = { 参考文献 } ,
1480 figure*      = { Figure } ,
1481 table*       = { Table } ,
1482 algorithm    = { 算法 } ,
1483 listalgorithm = { 算 \protect \quad 法 } ,
1484 abbr         = { 缩略语对照表 } ,
1485 nom          = { 符号对照表 } ,
1486 ack         = { 致 \protect \quad 谢 } ,
1487 resume      = { 个人简历 } ,
1488 digest      = { 大摘要 } ,
1489 achv        = { 学术论文和科研成果目录 }
1490 }
1491 </zh>

1492 <*de>
1493 \keys_set_known:nn { sjtu / name }
1494 {
1495 contents     = { Inhaltsverzeichnis } ,
1496 listfigure   = { Abbildungsverzeichnis } ,
1497 listtable    = { Tabellenverzeichnis } ,
1498 figure       = { Abbildung } ,
1499 table        = { Tabelle } ,
1500 abstract     = { Zusammenfassung } ,
1501 index        = { Index } ,
1502 appendix     = { Anhang } ,
1503 proof        = { Beweis } ,
1504 bib          = { Literaturverzeichnis } ,
1505 part         = { Teil } ,
1506 chapter     = { Kapitel } ,

```



```

1507 figure*      = { Figure          } ,
1508 table*       = { Table           } ,
1509 algorithm    = { Algorithmus     } ,
1510 listalgorithm = { Algorithmenverzeichnis } ,
1511 abbr         = { Abkürzungsverzeichnis } ,
1512 nom          = { Symbolverzeichnis } ,
1513 ack          = { Danksagungen     } ,
1514 resume      = { Lebenslauf       } ,
1515 digest       = { Kurzfassung      } ,
1516 achv        = { Forschungsleistungen }
1517 }
1518 </de>

1519 <*ja>
1520 \keys_set_known:nn { sjtu / name }
1521 {
1522 contents      = { 目 \protect \quad 次 } ,
1523 listfigure    = { 図目次           } ,
1524 listtable     = { 表目次           } ,
1525 figure       = { 図                 } ,
1526 table        = { 表                 } ,
1527 abstract     = { 概 \protect \quad 要 } ,
1528 index        = { 索 \protect \quad 引 } ,
1529 appendix     = { 付録             } ,
1530 proof        = { 证明             } ,
1531 bib          = { 参考文献           } ,
1532 figure*      = { Figure           } ,
1533 table*       = { Table            } ,
1534 algorithm    = { アルゴリズム     } ,
1535 listalgorithm = { アルゴリズム目次 } ,
1536 abbr         = { 略語表           } ,
1537 nom          = { 記号表           } ,
1538 ack          = { 謝 \protect \quad 辞 } ,
1539 resume      = { 履歴書           } ,
1540 digest       = { 要 \protect \quad 約 } ,
1541 achv        = { 研究業績書       }
1542 }
1543 </ja>
1544 </scheme>

```

载入名称配置。

```

1545 <*class>
1546 <*thesis>
1547 \clist_map_inline:Nn \g__sjtu_lang_clist
1548 { \file_input:n { sjtu-name-thesis- #1 .def } }
1549 \clist_map_inline:nn
1550 { title_page, declaration, abstract }
1551 { \__sjtu_define_name:nv {#1} { c__sjtu_name_ #1 _ \g__sjtu_lang_tl _tl } }
1552 </thesis>
</thesis> 1553 \file_input:n { sjtu-name-generic- \g__sjtu_lang_tl .def }

```

6.8 页面设置

利用 `geometry` 宏包设置页面边距以及页眉高度。

```

1554 \geometry
1555 {
1556 top          = 3.5 cm,
1557 bottom      = 4.0 cm,
1558 left        = 2.5 cm,
1559 right       = 2.5 cm,
</thesis> 1560 bindingoffset = 0.5 cm,
1561 headheight  = 1.5 cm,
1562 headsep     = 0.5 cm,
1563 footskip    = 1.0 cm
1564 }

```

学位论文页面纵向顶部对齐。

```
1565 <*thesis>
1566 \AtEndOfClass { \raggedbottom }
1567 </thesis>
```

6.9 页眉页脚

ctex 宏包使用 heading 选项后,会把页面格式设置为 headings。因此必须在 ctex 调用之后重新设置 \pagestyle 为 fancy。

```
1568 \pagestyle { fancy }
```

清除所有页眉页脚。

```
1569 \fancyhf { }
```

style/header-font 设置页眉页脚字体。
style/footer-font

```
1570 \keys_define:nn { sjtu / style }
1571 {
1572   header-font .tl_set:N = \l__sjtu_style_header_font_tl ,
<thesis> 1573   header-font .initial:n = \zihao { -5 } \setbaselineskip { 12 bp } ,
<!thesis> 1574   header-font .initial:n = \zihao { -5 } \sffamily ,
1575   footer-font .tl_set:N = \l__sjtu_style_footer_font_tl ,
<thesis> 1576   footer-font .initial:n = \zihao { -5 } \setbaselineskip { 12 bp }
<!thesis> 1577   footer-font .initial:n = \zihao { -5 }
1578 }
1579 \fancyheadinit { \l__sjtu_style_header_font_tl }
1580 \fancyfootinit { \l__sjtu_style_footer_font_tl }
```

style/header-uppercase 页眉西文是否大写。

```
\__sjtu_nouppercase:n
1581 \keys_define:nn { sjtu / style }
1582 {
1583   header-uppercase .choice: ,
1584   header-uppercase / true .code:n =
1585     { \cs_set_eq:NN \__sjtu_nouppercase:n \use:n } ,
1586   header-uppercase / false .code:n =
1587     { \cs_set:Nn \__sjtu_nouppercase:n { \nouppercase {##1} } } ,
1588   header-uppercase .default:n = { true } ,
1589   header-uppercase .initial:n = { false }
1590 }
1591 \cs_generate_variant:Nn \__sjtu_nouppercase:n { V }
```

style/page-number 页脚页码格式。

```
\__sjtu_page:n
1592 \cs_new:Nn \__sjtu_thepage: { \thepage }
1593 \keys_define:nn { sjtu / style }
1594 {
1595   page-number .cs_set:Np = \__sjtu_page:n #1 ,
1596   page-number .initial:n = { {#1} }
1597 }
```

设置页眉内容。

```
1598 \tl_set:Nn \l__sjtu_header_tl
1599 {
1600 <*thesis>
1601 {
1602   \__sjtu_set_cjk_default_zh: \normalfont
1603   \l__sjtu_info_subject_zh_tl
1604 }
1605 </thesis>
1606 <!thesis>
1607   \includegraphics [ height = 1.2 cm ]
1608     { sjtu-vi-logo-small-red.pdf }
1609 </!thesis>
1610 }
```

```

<thesis> 1611 \tl_set:Nn \l__sjtu_leftmark_tl { \leftmark }
</thesis> 1612 \tl_set:Nn \l__sjtu_leftmark_tl { \l__sjtu_info_subject_tl }
1613 \tl_set:Nn \l__sjtu_rightmark_tl { \leftmark }

```

设置页眉页脚。

```

1614 \bool_if:NTF \g__sjtu_twoside_bool
1615 {
1616   \fancyhead [ LO, RE ] { \l__sjtu_header_tl }
1617   \fancyhead [ LE ]     { \__sjtu_nouppercase:V \l__sjtu_leftmark_tl }
1618   \fancyhead [ RO ]     { \__sjtu_nouppercase:V \l__sjtu_rightmark_tl }
1619 }
1620 {
1621   \fancyhead [ L ] { \l__sjtu_header_tl }
1622   \fancyhead [ R ] { \__sjtu_nouppercase:V \l__sjtu_rightmark_tl }
1623 }
1624 \fancyfoot [ C ] { \__sjtu_page:n { \__sjtu_thepage: } }

```

`\headrule` `sjtuthesis` 的页眉线。

```

1625 <*thesis>
1626 \cs_set:Npn \headrule
1627 {
1628   \hrule height 2.25 pt width \headwidth
1629   \skip_vertical:n { 0.75 pt }
1630   \hrule height 0.75 pt width \headwidth
1631   \skip_vertical:n { -3.75 pt }
1632 }
1633 </thesis>

```

重定义 `plain` 样式。

```

1634 <*!thesis>
1635 \bool_if:NTF \g__sjtu_twoside_bool
1636 {
1637   \fancypagestyle { plain }
1638   {
1639     \fancyhead [ LE, RO ] { }
1640     \tl_set:Nn \headrulewidth { 0 pt }
1641   }
1642 }
1643 {
1644   \fancypagestyle { plain }
1645   {
1646     \fancyhead [ R ] { }
1647     \tl_set:Nn \headrulewidth { 0 pt }
1648   }
1649 }
1650 </!thesis>

```

`SJTU@null` 样式, 不对当前页面样式做任何修改。

```

1651 \cs_new_eq:NN \ps@SJTU@null \prg_do_nothing:

```

`\cleardoublepage` 空白页清空页眉页脚。

```

1652 \RenewDocumentCommand \cleardoublepage { }
1653 {
1654   \clearpage
1655   \bool_if:NT \g__sjtu_twoside_bool
1656   {
1657     \int_if_odd:nF \c@page
1658     { \hbox:n { } \thispagestyle { empty } \newpage }
1659   }
1660 }

```

6.10 页码设置

文档初始页码编码设置。

```
<thesis> 1661 \pagenumbering { Alph }
```

`\frontmatter` 前置部分使用大写罗马数字编码。

```
1662 <*thesis>
1663 \RenewDocumentCommand \frontmatter { }
1664 {
1665   \cleardoublepage
1666   \@mainmatterfalse
1667   \pagenumbering { Roman }
1668 }
1669 </thesis>
```

6.11 章节标题结构

设置章节标题样式。

```
1670 <!*article>
1671 \ctex_set:nn { chapter }
1672 {
1673   pagestyle = SJTU@null ,
1674   fixskip = true ,
1675 <*thesis>
1676   beforekip = 27 bp ,
1677   afterkip = 27 bp ,
1678   format = \zihao { 3 } \setbaselineskip{ 20 bp } \bfseries
1679           \CJKsffamily \centering ,
1680 </thesis>
1681 <*report>
1682   beforekip = 30 pt ,
1683   afterkip = 24 pt ,
1684   format = \Large \bfseries \CJKsffamily \centering ,
1685 </report>
1686   nameformat = ,
1687   titleformat = ,
1688   lofskip = \c_zero_skip ,
1689   lotskip = \c_zero_skip ,
1690   aftername = \quad
1691 }
1692 </!article>
1693 </class>
1694 <*scheme&(zh|ja)>
1695 \keys_set_known:nn { ctex / chapter }
1696 { name = { 第 \space , \space 章 } }
1697 </scheme&(zh|ja)>
1698 <*class>
1699 \ctex_set:nn { section }
1700 <*thesis>
1701 {
1702   beforekip = 24 bp ,
1703   afterkip = 6 bp ,
1704   format = \zihao { 4 } \setbaselineskip { 18 bp } \bfseries
1705           \CJKsffamily
1706 }
1707 </thesis>
<!thesis> 1708 { format = \large \bfseries \CJKsffamily }
1709 \ctex_set:nn { subsection }
1710 <*thesis>
1711 {
1712   beforekip = 12 bp ,
1713   afterkip = 6 bp ,
1714   format = \zihao { -4 } \setbaselineskip { 16 bp } \bfseries
1715           \CJKsffamily
```

```

1716 }
1717 </thesis>
<!thesis> 1718 { format = \normalsize \bfseries \CJKsffamily }
1719 \ctex_set:nn { subsubsection }
1720 <*thesis>
1721 {
1722     beforeskip = 6 bp ,
1723     afterskip = 6 bp ,
1724     format = \zihao { -4 } \setbaselineskip { 16 bp } \normalfont
1725 }
1726 </thesis>
<!thesis> 1727 { format = \normalsize \normalfont }
1728 \ctex_set:n { secnumdepth = 3 }

```

style/indent-first 章节标题后首段是否缩进。

```

1729 \keys_define:nn { sjtu / style }
1730 {
1731     indent-first .choice: ,
1732     indent-first .choices:nn =
1733     { true, false }
1734     {
1735         \clist_map_inline:nn
1736         {
<article> 1737             part,
<!article> 1738             chapter,
1739             section, subsection, subsubsection,
1740             paragraph, subparagraph
1741         }
1742         { \ctex_set:nn {####1} { afterindent = #1 } }
1743     } ,
1744     indent-first .default:n = { true } ,
1745     indent-first .initial:n = { true }
1746 }

```

\SJTU@head 定义一个灵活的章节标题命令专门处理不同的需求。

```

\__sjtu_head_aux_s:nn 1747 \NewDocumentCommand \SJTU@head { s O{#3} m O{#2} }
\__sjtu_head_aux_s:nx 1748 {
\__sjtu_pdf_bookmark:nn <!article> 1749     \CTEX@chapter@break
\__sjtu_phantom_section: 1750     \IfBooleanTF {#1}
1751     { \tl_if_empty:nF {#4} { \__sjtu_pdf_bookmark:nn { 0 } {#4} } }
1752     {
1753         \__sjtu_phantom_section:
<!article> 1754         \addcontentsline { toc } { chapter } {#4}
<article> 1755         \addcontentsline { toc } { section } {#4}
1756     }
1757     \cs_set_eq:NN \__sjtu_orig_ctex_gettitle:n \CTEX@gettitle
1758     \cs_set:Npn \CTEX@gettitle ##1 { \__sjtu_orig_ctex_gettitle:n {#2} }
<!article> 1759     \chapter* {#3}
<article> 1760     \section* {#3}
1761     \cs_set_eq:NN \CTEX@gettitle \__sjtu_orig_ctex_gettitle:n
1762     \@mkboth { \MakeUppercase {#2} } { \MakeUppercase {#2} }
1763 }
1764 <*thesis>
1765 \cs_new:Npn \__sjtu_head_aux_s:nn #1#2
1766 { \SJTU@head* [#1] {#2} }
1767 \cs_generate_variant:Nn \__sjtu_head_aux_s:nn { nx }
1768 </thesis>
1769 \cs_new_eq:NN \__sjtu_pdf_bookmark:nn \use_none:nn
1770 \cs_new_eq:NN \__sjtu_phantom_section: \prg_do_nothing:
1771 </class>

```

6.12 段落

设置全文首行缩进。

```
1772 <*scheme>
```

```

1773 \ctex_if_autoindent_touched:F
<zh> 1774 { \ctex_set:n { autoindent = true } }
<en|de> 1775 { \ctex_set:n { autoindent = 1.5 em } }
<ja> 1776 { \ctex_set:n { autoindent = 1 } }

```

`\verse` 修改诗歌和引用环境的缩进。

```

\quotation
<zh|ja> 1777 \ctex_patch_cmd:Nnn \verse { -1.5em } { -2 \ccwd }
<zh|ja> 1778 \ctex_patch_cmd:Nnn \verse { 1.5em } { 2 \ccwd }
1779 \ctex_patch_cmd:Nnn \quotation { 1.5em } { \parindent }
1780 </scheme>

```

使用 `enumitem` 调整默认列表环境的间距。

```

1781 <*class>
1782 \setlist { nosep }

```

6.13 数学公式

`style/equation-font` 设置行间数学公式的字体。

```

1783 \keys_define:nn { sjtu / style }
1784 {
1785   equation-font .tl_set:N = \SJTU@style@equation@font ,
<thesis> 1786   equation-font .initial:x = \exp_not:N \linespread { }
<thesis> 1787   \exp_not:N \zihao { \g__sjtu_zihao_tl }
<!thesis> 1788   equation-font .initial:V = \c_empty_tl
1789 }
1790 \clist_map_inline:nn
1791 {
1792   array, matrix, pmatrix, bmatrix, Bmatrix, vmatrix, Vmatrix,
1793   matrix*, pmatrix*, bmatrix*, Bmatrix*, vmatrix*, Vmatrix*,
1794   cases, cases*, dcases, dcases*, rcases, rcases*, drcases, drcases*,
1795   aligned, alignedat, gathered, multlined, lgathered, rgathered
1796 }
1797 { \AtBeginEnvironment {#1} { \SJTU@style@equation@font } }
1798 \clist_map_inline:nn
1799 { \start@gather, \start@align, \start@multline }
1800 {
1801   \ctex_patch_cmd:Nnn #1
1802   { \collect@body }
1803   {
1804     \SJTU@style@equation@font
1805     \collect@body
1806   }
1807 }
1808 \ctex_patch_cmd:Nnn \gather@split
1809 { \spread@equation }
1810 {
1811   \SJTU@style@equation@font
1812   \spread@equation
1813 }

```

6.14 浮动体

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。

```

1814 \tl_set:Nn \textfraction { 0.15 }
1815 \tl_set:Nn \topfraction { 0.85 }
1816 \tl_set:Nn \bottomfraction { 0.65 }
1817 \tl_set:Nn \floatpagefraction { 0.60 }

```

`style/float-font` 设置浮动体内的字体。

```

1818 \keys_define:nn { sjtu / style }
1819 {
1820   float-font .tl_set:N = \SJTU@style@float@font ,
<thesis> 1821   float-font .initial:n = \zihao { 5 } \setbaselineskip { 14 bp }
<!thesis> 1822   float-font .initial:n = \zihao { 5 }
1823 }
1824 \ctex_patch_cmd:Nnn \floatboxreset
1825 { \normalsize } { \SJTU@style@float@font }

```

`style/caption-font` 题注格式。
`style/subcaption-font`

```

1826 \keys_define:nn { sjtu / style }
1827 {
    bicaption 中双语标题之间的间距受 caption 字体定义 normalsize 的影响, 这里我们直接
    重定义 normalsize。
1828   caption-font .code:n =
1829     { \DeclareCaptionFont { normalsize } {#1} } ,
<thesis> 1830   caption-font .initial:n = \zihao { 5 } \setbaselineskip { 14 bp }
<thesis> 1831     \bfseries ,
<!thesis> 1832   caption-font .initial:n = \zihao { 5 } \bfseries ,
1833   subcaption-font .code:n =
1834     { \DeclareCaptionFont { SJTU@sub@font } {#1} } ,
<thesis> 1835   subcaption-font .initial:n = \zihao { 5 } \setbaselineskip { 14 bp }
<thesis> 1836     \normalfont
<!thesis> 1837   subcaption-font .initial:n = \zihao { 5 } \normalfont
1838 }
1839 \captionsetup
1840 {
1841   bi-slc = off ,
1842   labelsep = quad ,
<thesis> 1843   skip = 6 bp
1844 }
1845 \captionsetup [ sub ]
1846 {
1847   bi-slc = on ,
1848   font = SJTU@sub@font ,
1849   format = hang
1850 }

```

双语题注。

```

1851 \DeclareCaptionOption { bi-second-names } [ ]
1852 {
1853   \tl_set:Nn \figurename { \SJTU@figurename@bi@second }
1854   \tl_set:Nn \tablename { \SJTU@tablename@bi@second }
1855 }
1856 \captionsetup [ bi-second ] { bi-second-names }

```

`style/num-sep` 图、表、公式以及定理编号中的分隔符。
`style/float-num-sep`
`style/equation-num-sep`
`style/theorem-num-sep`

```

1857 \keys_define:nn { sjtu / style }
1858 {
1859   num-sep .code:n =
1860     {
1861       \tl_set:Nn \SJTU@style@fl@num@sep {#1}
1862       \tl_set:Nn \SJTU@style@eq@num@sep {#1}
1863       \tl_set:Nn \@thmcountersep {#1}
1864     } ,
1865   num-sep .initial:n = { . } ,
1866   float-num-sep .tl_set:N = \SJTU@style@fl@num@sep ,
1867   equation-num-sep .tl_set:N = \SJTU@style@eq@num@sep ,
1868   theorem-num-sep .tl_set:N = \@thmcountersep
1869 }

```

```

\SJTU@counterwithin 1870 \NewDocumentCommand \SJTU@counterwithin
1871 { s O{ \SJTU@style@fl@num@sep } O{ \arabic } m m }
1872 {
1873   \@ifbothcounters {#4} {#5}
1874   {
1875     \@addtoreset {#4} {#5}
1876     \IfBooleanF {#1}
1877     {
1878       \cs_gset:cpo { the #4 }
1879       { \cs:w the #5 \cs_end: #2 #3 {#4} }
1880     }
1881   }
1882 }

```

定义图、表、公式的编号格式。

```

1883 <!*article>
1884 \SJTU@counterwithin { figure } { chapter }
1885 \SJTU@counterwithin { table } { chapter }
1886 \SJTU@counterwithin [ \SJTU@style@eq@num@sep ] { equation } { chapter }
1887 </!*article>

```

`\l_sjtu_counter_without_chapter_clist` 大摘要中不需要随章编号的各计数器。

```

1888 <!*thesis>
1889 \clist_set:Nn \l_sjtu_counter_without_chapter_clist
1890 { section, figure, table, equation }
1891 </!*thesis>

```

6.15 脚注

`__sjtu_makefnmark_plain:` 储存原始脚注相关命令。

```

\__sjtu_thefootnote_plain:
\__sjtu_thempfootnote_plain: 1892 \cs_set_eq:NN \__sjtu_makefnmark_plain: \@makefnmark
1893 \cs_set_eq:NN \__sjtu_thefootnote_plain: \thefootnote
1894 \cs_set_eq:NN \__sjtu_thempfootnote_plain: \thempfootnote

```

`__sjtu_footnote_number:N` 通过 Unicode 码位调用带圈数字。

```

1895 \cs_new:Npn \__sjtu_footnote_number:N #1
1896 {
1897   \int_compare:nNnTF {#1} < { 21 }
1898   { \__sjtu_unicode_char:n { \int_eval:n { "2460 - 1 + #1 } } }
1899   {
1900     \int_compare:nNnTF {#1} < { 36 }
1901     { \__sjtu_unicode_char:n { \int_eval:n { "3251 - 21 + #1 } } }
1902     {
1903       \int_compare:nNnTF {#1} < { 51 }
1904       { \__sjtu_unicode_char:n { \int_eval:n { "32B1 - 36 + #1 } } }
1905       { \msg_warning:nn { sjtutex } { too-many-footnotes } }
1906     }
1907   }
1908 }
1909 \msg_new:nnn { sjtutex } { too-many-footnotes }
1910 { Too~ many~ footnotes. }

```

`__sjtu_makefnmark_circled:` 重定义内部脚注文字命令, 使用带圈数字编号时, 脚注不使用上标。见 <https://www.zhihu.com/question/53030087>。

```

1911 \cs_new:Nn \__sjtu_makefnmark_circled: { \hbox:n { \@thefnmark } }

```

`style/fnmark-font` 脚注编号字体。

```

1912 \keys_define:nn { sjtu / style }
1913 {
1914   fnmark-font .choice: ,
1915   fnmark-font / haranoaji .code:n =
1916   {

```



```

1917     \_sjtu_engine_case:nn
1918     { \tl_set_eq:NN \l__sjtu_style_fnmark_font_tl \c_empty_tl }
1919     {
1920       \tl_set:Nn \l__sjtu_style_fnmark_font_tl
1921       {
1922         \CJKfontspec { HaranoAjiMincho }
1923         [
1924           Extension = .otf ,
1925           UprightFont = *-Regular ,
1926           BoldFont = *-Bold
1927         ]
1928       }
1929     } ,
1930   fnmark-font / unknown .tl_set:N = \l__sjtu_style_fnmark_font_tl ,
1931   fnmark-font .initial:V = \c_empty_tl
1932 }
1933 }

```

`_sjtu_thefootnote_circled:` 使用带圈数字编号脚注。

`_sjtu_thempfootnote_circled:`

```

1934 \cs_new:Nn \_sjtu_thefootnote_circled:
1935 { { \l__sjtu_style_fnmark_font_tl \_sjtu_footnote_number:N \c@footnote } }
1936 \cs_new:Nn \_sjtu_thempfootnote_circled:
1937 { { \l__sjtu_style_fnmark_font_tl \_sjtu_footnote_number:N \c@mpfootnote } }

```

`style/fnmark-style` 脚注编号样式。

```

1938 \keys_define:nn { sjtu / style }
1939 {
1940   fnmark-style .choice: ,
1941   fnmark-style / plain .code:n =
1942   {
1943     \cs_set_eq:NN \_sjtu_makefnmark: \_sjtu_makefnmark_plain:
1944     \cs_set_eq:NN \thefootnote \_sjtu_thefootnote_plain:
1945     \cs_set_eq:NN \thempfootnote \_sjtu_thempfootnote_plain:
1946   } ,
1947   fnmark-style / circled .code:n =
1948   {
1949     \cs_set_eq:NN \_sjtu_makefnmark: \_sjtu_makefnmark_circled:
1950     \cs_set_eq:NN \thefootnote \_sjtu_thefootnote_circled:
1951     \cs_set_eq:NN \thempfootnote \_sjtu_thempfootnote_circled:
1952   }
1953 }
1954 </class>
1955 <*scheme>
1956 \keys_set:nn { sjtu / style }
1957 { fnmark-style = circled }
1958 { fnmark-style = plain }
1959 </scheme>

```

在导言末尾修改 `\@makefntext`, 支持使用 `footmisc` 修改脚注格式。

```

1960 <*class>
1961 \ctex_at_end_preamble:n {
1962   \cs_set_eq:NN \_sjtu_orig_make_fntext:n \@makefntext
1963   \cs_set:Npn \@makefntext #1
1964   {
1965     \group_begin:
1966     \cs_set_eq:NN \@makefnmark \_sjtu_makefnmark:
1967     \_sjtu_orig_make_fntext:n {#1}
1968     \group_end:
1969   }
1970 }

```

6.16 信息录入

`_sjtu_info_keys_define:n` 定义 sjtuthesis 不同语种 sjtu/info 键值类的辅助函数。

```

1971 <*thesis>
1972 \cs_new:Npn \_sjtu_info_keys_define:n #1
1973 {
1974   \clist_map_inline:nn
1975     {
1976       title, display_title, subject, author, date,
1977       supervisor, assoc_supervisor, department,
1978       co_supervisor, major, degree
1979     }
1980     { \tl_new:c { l__sjtu_info_ ##1 _ #1 _tl } }
1981   \clist_map_inline:nn
1982     { keywords, fund }
1983     { \clist_new:c { l__sjtu_info_ ##1 _ #1 _clist } }
1984   \keys_define:nn { sjtu }
1985     { info / #1 .meta:nn = { sjtu / info / #1 } {##1} }
1986   \keys_define:nn { sjtu / info }
1987     { #1 .meta:nn = { sjtu / info / #1 } {##1} }
1988   \keys_define:nn { sjtu / info / #1 }
1989     {
1990       title .code:n =
1991         {
1992           \tl_set:cn { l__sjtu_info_title_ #1 _tl } {##1}
1993           \tl_if_empty:cT { l__sjtu_info_display_title_ #1 _tl }
1994             { \tl_set:cn { l__sjtu_info_display_title_ #1 _tl } {##1} }
1995         } ,
1996       display-title .tl_set:c = l__sjtu_info_display_title_ #1 _tl ,
1997       subject .tl_set:c = l__sjtu_info_subject_ #1 _tl ,
1998       keywords .clist_set:c = l__sjtu_info_keywords_ #1 _clist ,
1999       author .tl_set:c = l__sjtu_info_author_ #1 _tl ,
2000       id .meta:nn = { sjtu / info } { id = {##1} } ,
2001       supervisor .tl_set:c = l__sjtu_info_supervisor_ #1 _tl ,
2002       assoc-supervisor .tl_set:c = l__sjtu_info_assoc_supervisor_ #1 _tl ,
2003       co-supervisor .tl_set:c = l__sjtu_info_co_supervisor_ #1 _tl ,
2004       degree .tl_set:c = l__sjtu_info_degree_ #1 _tl ,
2005       department .tl_set:c = l__sjtu_info_department_ #1 _tl ,
2006       major .tl_set:c = l__sjtu_info_major_ #1 _tl ,
2007       fund .clist_set:c = l__sjtu_info_fund_ #1 _clist ,
2008       date .meta:nn = { sjtu / info } { date = {##1} } ,
2009       display-date .tl_set:c = l__sjtu_info_date_ #1 _tl ,
2010     }
2011 }

```

`_sjtu_info_id_zh_tl` 单独处理学号。

```

2012 \tl_new:N \_sjtu_info_id_zh_tl
2013 \keys_define:nn { sjtu / info }
2014 { id .tl_set:N = \_sjtu_info_id_zh_tl }

```

`_sjtu_info_supervisors_clist` 标题中需要显示的导师列表。

```

2015 \clist_set:Nn \_sjtu_info_supervisors_clist { supervisor }

```

盲审模式下隐藏作者、导师姓名等信息。

```

2016 \ctex_at_end_preamble:n
2017 {
2018   \bool_if:NT \g__sjtu_review_bool
2019     {
2020       \clist_map_inline:Nn \g__sjtu_lang_clist
2021         {
2022           \clist_map_inline:nn
2023             { author, supervisor, assoc_supervisor, co_supervisor }
2024             { \tl_clear:c { l__sjtu_info_ ##1 _ #1 _tl } }
2025           \clist_clear:c { l__sjtu_info_fund_ #1 _clist }
2026         }

```

```

2027     \tl_clear:N \l__sjtu_info_id_zh_tl
2028   }
2029 }
2030 </thesis>
2031 </class>

<lang&thesis&zh> 2032 \__sjtu_info_keys_define:n { zh }
<lang&thesis&en> 2033 \__sjtu_info_keys_define:n { en }
<lang&thesis&de> 2034 \__sjtu_info_keys_define:n { de }
<lang&thesis&ja> 2035 \__sjtu_info_keys_define:n { ja }

\l__sjtu_info_subject_tl 2036 <*class&!thesis>
\l__sjtu_info_keywords_clist 2037 \tl_new:N \l__sjtu_info_subject_tl
2038 \clist_new:N \l__sjtu_info_keywords_clist
2039 \keys_define:nn { sjtu / info }
2040 {
2041   title           .tl_set:N = \@title ,
2042   author          .tl_set:N = \@author ,
2043   display-date    .tl_set:N = \@date ,
2044   subject         .tl_set:N = \l__sjtu_info_subject_tl ,
2045   keywords       .clist_set:N = \l__sjtu_info_keywords_clist ,
2046 }
2047 </class&!thesis>

```

6.17 多语言支持

初始化主题。

```

2048 <*lang>
2049 <*thesis>
<zh> 2050 \keys_define:nn { sjtu / info / zh }
<en> 2051 \keys_define:nn { sjtu / info / en }
<de> 2052 \keys_define:nn { sjtu / info / de }
<ja> 2053 \keys_define:nn { sjtu / info / ja }
2054 {
2055   subject          .initial:x =
2056   {
2057 <*zh>
2058     \exp_not:V \c__sjtu_name_univ_zh_tl
2059     \exp_not:V \c__sjtu_name_degree_level_zh_tl
2060     \exp_not:V \c__sjtu_name_thesis_zh_tl
2061 </zh>
2062 <*en>
2063     A~ Dissertation~ Submitted~ to \exp_not:N \
2064     { \exp_not:V \c__sjtu_name_univ_en_tl }~ for~
2065     the~ Degree~ of~ { \exp_not:V \c__sjtu_name_degree_level_en_tl }
2066 </en>
2067 <*de>
2068     Eine~ Dissertation~ Eingereicht~ an \exp_not:N \
2069     der~ { \exp_not:V \c__sjtu_name_univ_de_tl }~ für~
2070     { \exp_not:V \c__sjtu_name_degree_level_de_tl } titel
2071 </de>
2072 <*ja>
2073     \exp_not:V \c__sjtu_name_univ_ja_tl
2074     \exp_not:V \c__sjtu_name_degree_level_ja_tl
2075     \exp_not:V \c__sjtu_name_thesis_ja_tl
2076 </ja>
2077   }
2078 }
2079 </thesis>

```

将形如 yyyy-mm-dd 或 yyyy-mm 的 ISO 日期格式字符串转化为日期表示。

中文日期。

```

\__sjtu_date_aux_zh:nnn 中文日期。
\__sjtu_date_aux_zh:w
\__sjtu_date_aux_short_zh:nn 2080 <*zh>
\__sjtu_date_aux_short_zh:w 2081 \cs_new:Npn \__sjtu_date_aux_zh:nnn #1#2#3
2082 {

```

```

2083 \int_to_arabic:n {#1} ~ { \exp_not:V \c__sjtu_name_year_zh_tl } ~
2084 \int_to_arabic:n {#2} ~ { \exp_not:V \c__sjtu_name_month_zh_tl } ~
2085 \int_to_arabic:n {#3} ~ { \exp_not:V \c__sjtu_name_day_zh_tl }
2086 }
2087 \cs_new:Npn \__sjtu_date_aux_zh:w #1-#2-#3 \q_stop
2088 { \__sjtu_date_aux_zh:nnn {#1} {#2} {#3} }
2089 \cs_new:Npn \__sjtu_date_aux_short_zh:nn #1#2
2090 {
2091   \int_to_arabic:n {#1} ~ { \exp_not:V \c__sjtu_name_year_zh_tl } ~
2092   \int_to_arabic:n {#2} ~ { \exp_not:V \c__sjtu_name_month_zh_tl }
2093 }
2094 \cs_new:Npn \__sjtu_date_aux_short_zh:w #1-#2 \q_stop
2095 { \__sjtu_date_aux_short_zh:nn {#1} {#2} }
2096 </zh>

```

__sjtu_ordinal_en:n 上标形式的序数词。

```

2097 <*en>
2098 \cs_new:Npn \__sjtu_ordinal_en:n #1
2099 {
2100   \int_to_arabic:n {#1}
2101   \exp_not:N \textsuperscript
2102   {
2103     \int_case:nnF { \int_mod:nn {#1} { 100 } }
2104     {
2105       { 11 } { th }
2106       { 12 } { th }
2107       { 13 } { th }
2108     }
2109     {
2110       \int_case:nnF { \int_mod:nn {#1} { 10 } }
2111       {
2112         { 1 } { st }
2113         { 2 } { nd }
2114         { 3 } { rd }
2115       }
2116       { th }
2117     }
2118   }
2119 }

```

__sjtu_date_aux_en:nnn 英文日期。

```

\__sjtu_date_aux_en:w
\__sjtu_date_aux_short_en:nn
\__sjtu_date_aux_short_en:w
2120 \cs_new:Npn \__sjtu_date_aux_en:nnn #1#2#3
2121 {
2122   \clist_item:Nn \c__sjtu_name_month_en_clist {#2} ~
2123   \__sjtu_ordinal_en:n {#3} , ~
2124   \int_to_arabic:n {#1}
2125 }
2126 \cs_new:Npn \__sjtu_date_aux_en:w #1-#2-#3 \q_stop
2127 { \__sjtu_date_aux_en:nnn {#1} {#2} {#3} }
2128 \cs_new:Npn \__sjtu_date_aux_short_en:nn #1#2
2129 {
2130   \clist_item:Nn \c__sjtu_name_month_en_clist {#2} , ~
2131   \int_to_arabic:n {#1}
2132 }
2133 \cs_new:Npn \__sjtu_date_aux_short_en:w #1-#2 \q_stop
2134 { \__sjtu_date_aux_short_en:nn {#1} {#2} }
2135 </en>

```

__sjtu_date_aux_de:nnn 德文日期。

```

\__sjtu_date_aux_de:w
\__sjtu_date_aux_short_de:nn
\__sjtu_date_aux_short_de:w
2136 <*de>
2137 \cs_new:Npn \__sjtu_date_aux_de:nnn #1#2#3
2138 {
2139   \clist_item:Nn \c__sjtu_name_month_de_clist {#2} ~
2140   {#3} , ~ \int_to_arabic:n {#1}
2141 }

```

```

2142 \cs_new:Npn \__sjtu_date_aux_de:w #1-#2-#3 \q_stop
2143 { \__sjtu_date_aux_de:nnn {#1} {#2} {#3} }
2144 \cs_new:Npn \__sjtu_date_aux_short_de:nn #1#2
2145 {
2146   \clist_item:Nn \c__sjtu_name_month_de_clist {#2} ,~
2147   \int_to_arabic:n {#1}
2148 }
2149 \cs_new:Npn \__sjtu_date_aux_short_de:w #1-#2 \q_stop
2150 { \__sjtu_date_aux_short_de:nn {#1} {#2} }
2151 </de>

```

日文日期。

```

\__sjtu_date_aux_ja:nnn
\__sjtu_date_aux_ja:w
\__sjtu_date_aux_short_ja:nn
\__sjtu_date_aux_short_ja:w
2152 <*ja>
2153 \cs_new:Npn \__sjtu_date_aux_ja:nnn #1#2#3
2154 {
2155   \int_to_arabic:n {#1} ~ { \exp_not:V \c__sjtu_name_year_ja_tl } ~
2156   \int_to_arabic:n {#2} ~ { \exp_not:V \c__sjtu_name_month_ja_tl } ~
2157   \int_to_arabic:n {#3} ~ { \exp_not:V \c__sjtu_name_day_ja_tl }
2158 }
2159 \cs_new:Npn \__sjtu_date_aux_ja:w #1-#2-#3 \q_stop
2160 { \__sjtu_date_aux_ja:nnn {#1} {#2} {#3} }
2161 \cs_new:Npn \__sjtu_date_aux_short_ja:nn #1#2
2162 {
2163   \int_to_arabic:n {#1} ~ { \exp_not:V \c__sjtu_name_year_ja_tl } ~
2164   \int_to_arabic:n {#2} ~ { \exp_not:V \c__sjtu_name_month_ja_tl }
2165 }
2166 \cs_new:Npn \__sjtu_date_aux_short_ja:w #1-#2 \q_stop
2167 { \__sjtu_date_aux_short_ja:nn {#1} {#2} }
2168 </ja>

```

设置语言格式辅助命令

```

\__sjtu_set_language_zh:
\__sjtu_set_language_en:
\__sjtu_set_language_de:
\__sjtu_set_language_ja:
\__sjtu_set_cjk_default_zh:
\__sjtu_set_cjk_default_ja:
2169 <*zh>
2170 \cs_new:Nn \__sjtu_set_cjk_default_zh:
2171 {
2172   \tl_set:Nn \CJKrmddefault { zhsong }
2173   \tl_set:Nn \CJKsfdefault { zhhei }
2174   \tl_set:Nn \CJKttdefault { zhfs }
2175 }
2176 \cs_new_protected:Nn \__sjtu_set_language_zh:
2177 {
2178   \tl_set:Nn \languagename { chinese }
2179   \ctex_set:n { autoindent = true }
2180   \__sjtu_set_cjk_default_zh:
2181   \normalfont
2182 }
2183 </zh>
2184 <*en|de>
<en> 2185 \cs_new_protected:Nn \__sjtu_set_language_en:
<de> 2186 \cs_new_protected:Nn \__sjtu_set_language_de:
2187 {
<en> 2188 \tl_set:Nn \languagename { english }
<de> 2189 \tl_set:Nn \languagename { ngerman }
2190 \ctex_set:n { autoindent = 1.5 em }
2191 \normalfont
2192 }
2193 </en|de>
2194 <*ja>
2195 \cs_new:Nn \__sjtu_set_cjk_default_ja:
2196 {
2197   \tl_set:Nn \CJKrmddefault { jamin }
2198   \tl_set:Nn \CJKsfdefault { jagoth }
2199   \tl_set:Nn \CJKttdefault { jagoth }
2200 }
2201 \cs_new_protected:Nn \__sjtu_set_language_ja:
2202 {
2203   \tl_set:Nn \languagename { japanese }

```

```

2204 \ctex_set:n { autoindent = 1 }
2205 \__sjtu_set_cjk_default_ja:
2206 \normalfont
2207 }
2208 </ja>

```

标题页页面样式, 页脚添加资助基金信息。

```

2209 <*thesis>
<zh> 2210 \cs_new:Npn \ps@SJTU@fund@zh
<en> 2211 \cs_new:Npn \ps@SJTU@fund@en
<de> 2212 \cs_new:Npn \ps@SJTU@fund@de
<ja> 2213 \cs_new:Npn \ps@SJTU@fund@ja
2214 {
2215 \ps@empty
2216 \cs_set:Npn \@oddfont
2217 {
2218 \minipage [ t ] { \textwidth }
2219 \centering \zihao { - 5 }
<zh> 2220 \clist_use:Nn \l__sjtu_info_fund_zh_clist { \par }
<en> 2221 \clist_use:Nn \l__sjtu_info_fund_en_clist { \par }
<de> 2222 \clist_use:Nn \l__sjtu_info_fund_de_clist { \par }
<ja> 2223 \clist_use:Nn \l__sjtu_info_fund_ja_clist { \par }
2224 \endminipage
2225 }
2226 \cs_set_eq:NN \@evenfoot \@oddfont
2227 }
2228 </thesis>
2229 </lang>

```

初始化语言名称。

```

2230 <*scheme>
<zh> 2231 \tl_set:Nn \languagename { chinese }
<en> 2232 \tl_set:Nn \languagename { english }
<de> 2233 \tl_set:Nn \languagename { ngerman }
<ja> 2234 \tl_set:Nn \languagename { japanese }
2235 </scheme>

```

载入语言配置。

```

2236 <*class>
<thesis> 2237 \clist_map_inline:Nn \g__sjtu_lang_clist
<thesis> 2238 { \file_input:n { sjtu-lang-thesis- #1 .def } }
<!thesis> 2239 \file_input:n { sjtu-lang-generic- \g__sjtu_lang_tl .def }
2240 \file_input:n { sjtu-scheme- \g__sjtu_lang_tl .def }

```

info/date 初始化日期。

```

2241 \keys_define:nn { sjtu / info }
2242 {
2243 date .code:n =
2244 {
2245 \regex_match:neTF { \d+-\d+-\d+ } {#1}
2246 {
2247 <*thesis>
2248 \clist_map_inline:Nn \g__sjtu_lang_clist
2249 {
2250 \tl_set:cx { l__sjtu_info_date_ ##1 _tl }
2251 { \exp_last_unbraced:ce { __sjtu_date_aux_ ##1 :w } #1 \q_stop }
2252 }
2253 </thesis>
2254 <!thesis>
2255 \tl_set:Nx \@date
2256 {
2257 \exp_last_unbraced:ce
2258 { __sjtu_date_aux_ \g__sjtu_lang_tl :w } #1 \q_stop
2259 }
2260 </!thesis>

```

```

2261     }
2262     {
2263         \regex_match:neT { \d+-\d+ } {#1}
2264         {
2265 <*thesis>
2266             \clist_map_inline:Nn \g__sjtu_lang_clist
2267             {
2268                 \tl_set:cx { l__sjtu_info_date_ ##1 _tl }
2269                 { \exp_last_unbraced:ce { __sjtu_date_aux_short_ ##1 :w } #1 \q_stop }
2270             }
2271 </thesis>
2272 <!*thesis>
2273             \tl_set:Nx \@date
2274             {
2275                 \exp_last_unbraced:ce
2276                 { __sjtu_date_aux_short_ \g__sjtu_lang_tl :w } #1 \q_stop
2277             }
2278 </!thesis>
2279         }
2280     }
2281 },
2282 date .initial:x =
2283 {
2284     \int_to_arabic:n { \c_sys_year_int } -
2285     \int_to_arabic:n { \c_sys_month_int } -
2286     \int_to_arabic:n { \c_sys_day_int }
2287 }
2288 }
<thesis> 2289 \tl_set:Nv \today { l__sjtu_info_date_ \g__sjtu_lang_tl _tl }
</thesis> 2290 \tl_set:Nv \today \@date

```

6.18 标题页

6.18.1 定义内部函数

汉字分散对齐的环境。

```

2291 <*thesis>
2292 \__sjtu_engine_case:nnn
2293 {
2294     \NewDocumentEnvironment { SJTU@CJK@FTS } { m b }
2295     {
2296         \mode_leave_vertical:
2297         \bool_set_false:N \l__sjtu_tmp_bool
2298         \cs_set_eq:NN \SJTU@CJK@FTS@Symbol \CJKsymbol
2299         \cs_set:Npn \CJKsymbol ##1
2300         {
2301             \bool_if:NTF \l__sjtu_tmp_bool
2302             { \hfil \SJTU@CJK@FTS@Symbol { ##1 } }
2303             {
2304                 \SJTU@CJK@FTS@Symbol { ##1 }
2305                 \bool_set_true:N \l__sjtu_tmp_bool
2306             }
2307         }
2308         \hbox_to_wd:nn {#1} {#2}
2309     } { }
2310 }
2311 {
2312     \NewDocumentEnvironment { SJTU@CJK@FTS } { m b }
2313     {
2314         \mode_leave_vertical:
2315         \cs_set:Npn \CJKglue
2316         { \skip_horizontal:n { \c_zero_dim plus 1 filll } }
2317         \hbox_to_wd:nn {#1} {#2}
2318     } { }
2319 }

```

```

2320 {
2321   \NewDocumentEnvironment { SJTU@CJK@FTS } { m b }
2322   {
2323     \mode_leave_vertical:
2324     \ltjsetparameter { kanjiskip = { \c_zero_dim plus 1 filll } }
2325     \hbox_to_wd:nn {#1} {#2}
2326   } { }
2327 }

```

汉字分散对齐的表格列说明符。

```

2328 \newcolumnntype { \SJTU@CT@D } [ 1 ]
2329 { >{ \begin { SJTU@CJK@FTS } {#1} } c <{ \end { SJTU@CJK@FTS } } }

```

信息输出。

```

\__sjtu_title_page_info_i:nnn
\__sjtu_title_page_info_i:nxx
\__sjtu_title_page_info_ii:n
2330 \cs_new:Npn \__sjtu_title_page_info_i:nnn #1#2#3
2331 {
2332   \clist_clear:N \l__sjtu_tmp_clist
2333   \clist_map_inline:nn {#3}
2334   {
2335     \clist_put_right:Nx \l__sjtu_tmp_clist
2336     {
2337       \exp_not:o { \cs:w c__sjtu_name_ ##1 _ #1 _tl \cs_end: }
2338       &
2339       \exp_not:o { \cs:w l__sjtu_info_ ##1 _ #1 _tl \cs_end: }
2340     }
2341   }
2342   \group_begin:
2343   \tl_set:Nn \arraystretch { 1 }
2344   \tabular {#2}
2345   \clist_use:Nn \l__sjtu_tmp_clist { \ }
2346   \endtabular
2347   \group_end:
2348 }
2349 \cs_new:Npn \__sjtu_title_page_info_ii:n #1
2350 {
2351   \tl_use:c { l__sjtu_info_department_ #1 _tl }
2352   \skip_vertical:N \c_zero_skip
2353   \tl_use:c { c__sjtu_name_univ_ #1 _tl }
2354   \skip_vertical:N \c_zero_skip
2355   \tl_use:c { c__sjtu_name_address_ #1 _tl }
2356   \skip_vertical:N \c_zero_skip
2357   \tl_use:c { l__sjtu_info_date_ #1 _tl }
2358 }
2359 \cs_generate_variant:Nn \__sjtu_title_page_info_i:nnn { nxx }
2360 </thesis>
2361 </class>

```

6.18.2 构建标题页

```

2362 <*lang>
2363 <*thesis>
2364 <*zh>
2365 \clist_map_inline:nn
2366 {
2367   { logo }
2368   {
2369     content =
2370     {
2371       \includegraphics [ width = 3 cm ]
2372       { sjtu-vi-badge-red.pdf }
2373     }
2374   },
2375   { subject }
2376   {
2377     format = \zihao { -2 } \setbaselineskip { 30 bp } ,

```



```

2378     content      = \l__sjtu_info_subject_zh_tl ,
2379     bottom-skip = \c_zero_dim plus 1 fill
2380   },
2381   { title }
2382   {
2383     format      = \zihao { 2 } \setbaselineskip { 36 bp } \bfseries ,
2384     content      = \l__sjtu_info_display_title_zh_tl ,
2385     bottom-skip = 30 bp plus 1 fill
2386   },
2387   { info }
2388   {
2389     format      = \zihao { 4 } \setbaselineskip { 30 bp } \heiti ,
2390     content      =
2391     {
2392       \__sjtu_title_page_info_i:nxx { zh }
2393       {
2394         \exp_not:N \SJTU@CT@D { 5 em }
2395         @ { \exp_not:V \c__sjtu_name_info_sep_zh_tl }
2396         >{ \exp_not:N \normalfont } 1
2397       }
2398       {
2399         author,
2400         id,
2401         \l__sjtu_info_supervisors_clist ,
2402         department,
2403         major,
2404         \int_compare:nNnF { \g__sjtu_thesis_type_int } = { 1 }
2405           { degree }
2406       }
2407     } ,
2408     bottom-skip = 30 bp
2409   },
2410   { date }
2411   {
2412     format      = \zihao { 4 } \setbaselineskip { 30 bp } \bfseries ,
2413     content      = \l__sjtu_info_date_zh_tl ,
2414   }
2415 }
2416 {
2417   \__sjtu_declare_component:nnn { title / zh } #1
2418 }
2419 \__sjtu_declare_page:nn { title / zh }
2420 {
2421   bookmark      = true ,
2422   bookmark-text = \c__sjtu_name_title_page_tl ,
2423   style          = SJTU@fund@zh ,
2424   format         = \linespread { } \__sjtu_set_language_zh: ,
2425   prefix         = title / zh ,
2426   components     = { logo, subject, title, info, date }
2427 }
2428 </zh>
2429 <*en|de|ja>
2430 \clist_map_inline:nn
2431 {
2432   { subject }
2433   {
2434     format      = \zihao { 4 } \setbaselineskip { 24 bp } \bfseries ,
(en) 2435     content      = \l__sjtu_info_subject_en_tl ,
(de) 2436     content      = \l__sjtu_info_subject_de_tl ,
(ja) 2437     content      = \l__sjtu_info_subject_ja_tl ,
2438     bottom-skip = \c_zero_dim plus 1 fill
2439   },
2440   { title }
2441   {
2442     format      = \zihao { -2 } \setbaselineskip { 30 bp } \bfseries ,
(en) 2443     content      = \MakeUppercase \l__sjtu_info_display_title_en_tl ,
(de) 2444     content      = \MakeUppercase \l__sjtu_info_display_title_de_tl ,

```

```

<ja> 2445     content      = \l__sjtu_info_display_title_ja_tl ,
2446     bottom-skip = \c_zero_dim plus 1 fill
2447   },
2448   { info   }
2449   {
2450     format      = \zihao { 3 } \setbaselineskip { 30 bp } \bfseries ,
2451     content     =
2452     {
<en> 2453       \__sjtu_title_page_info_i:nxx { en }
<de> 2454       \__sjtu_title_page_info_i:nxx { de }
<ja> 2455       \__sjtu_title_page_info_i:nxx { ja }
2456       {
<en> 2457         r @ { \exp_not:V \c__sjtu_name_info_sep_en_tl }
<de> 2458         r @ { \exp_not:V \c__sjtu_name_info_sep_de_tl }
<ja> 2459         r @ { \exp_not:V \c__sjtu_name_info_sep_ja_tl }
2460         >{ \exp_not:N \normalfont } l
2461       }
2462       { author, \l__sjtu_info_supervisors_clist }
2463     } ,
2464     bottom-skip = 30 bp plus 1 fill
2465   },
2466   { date   }
2467   {
2468     format      = \zihao { 3 } \setbaselineskip { 30 bp } ,
2469     content     =
<en> 2470     { \__sjtu_title_page_info_ii:n { en } } ,
<de> 2471     { \__sjtu_title_page_info_ii:n { de } } ,
<ja> 2472     { \__sjtu_title_page_info_ii:n { ja } } ,
2473   } ,
2474 }
2475 {
<en> 2476 \__sjtu_declare_component:nnn { title / en } #1
<de> 2477 \__sjtu_declare_component:nnn { title / de } #1
<ja> 2478 \__sjtu_declare_component:nnn { title / ja } #1
2479 }
2480 <*en>
2481 \__sjtu_declare_page:nn { title / en }
2482 {
2483   style      = SJTU@fund@en ,
2484   format     = \linespread { } \__sjtu_set_language_en: ,
2485   prefix     = title / en ,
2486   components = { subject, title, info, date }
2487 }
2488 </en>
2489 <*de>
2490 \__sjtu_declare_page:nn { title / de }
2491 {
2492   style      = SJTU@fund@de ,
2493   format     = \linespread { } \__sjtu_set_language_de: ,
2494   prefix     = title / de ,
2495   components = { subject, title, info, date }
2496 }
2497 </de>
2498 <*ja>
2499 \__sjtu_declare_page:nn { title / ja }
2500 {
2501   style      = SJTU@fund@ja ,
2502   format     = \linespread { } \__sjtu_set_language_ja: ,
2503   prefix     = title / ja ,
2504   components = { subject, title, info, date }
2505 }
2506 </ja>
2507 </en|de|ja>
2508 </thesis>
2509 </lang>

```

`\maketitle` 生成标题页, 输出前先确定需要显示的导师列表。

```

2510 <*class>
2511 <*thesis>
2512 \RenewDocumentCommand \maketitle { }
2513 {
2514   \clist_map_inline:nn
2515     { assoc_supervisor, co_supervisor }
2516     {
2517       \tl_if_empty:cF { l__sjtu_info_ ##1 _zh_tl }
2518       { \clist_put_right:Nn \l__sjtu_info_supervisors_clist {##1} }
2519     }
2520   \clist_map_inline:Nn \g__sjtu_lang_clist
2521     { \UseInstance { sjtu } { title / ##1 } }
2522 }
2523 </thesis>

```

6.19 原创性声明及使用授权书

```

2524 <*thesis>
2525 \cs_new_protected:Npn \__sjtu_signature:N #1
2526 {
2527   \parbox [ t ] { 12 em }
2528     { #1 \c__sjtu_signature_text_zh_tl }
2529 }
2530 \clist_map_inline:nn
2531 {
2532   { orig / title }
2533   {
2534     format      = \zihao { 3 } \setbaselineskip { 30 bp }
2535                 \bfseries \heiti ,
2536     content     =
2537       {
2538         \c__sjtu_name_univ_zh_tl
2539         \skip_vertical:N \c_zero_skip
2540         \c__sjtu_name_thesis_zh_tl
2541         \c__sjtu_name_orig_decl_zh_tl
2542       } ,
2543     bottom-skip = 12 bp
2544   },
2545   { orig / text }
2546   {
2547     format      = \zihao { -4 } \setbaselineskip { 24 bp } ,
2548     content     = \c__sjtu_orig_decl_text_zh_tl ,
2549     bottom-skip = 24 bp ,
2550     align       = normal
2551   },
2552   { orig / sign }
2553   {
2554     format      = \zihao { 4 } \setbaselineskip { 30 bp } ,
2555     content     =
2556       {
2557         \__sjtu_signature:N \c__sjtu_name_decl_author_zh_tl
2558         \skip_horizontal:n { 4 em } \hbox:n { }
2559       } ,
2560     bottom-skip = \c_zero_dim plus 2 fill ,
2561     align       = right
2562   },
2563   { auth / title }
2564   {
2565     format      = \zihao { 3 } \setbaselineskip { 30 bp }
2566                 \bfseries \heiti ,
2567     content     =
2568       {
2569         \c__sjtu_name_univ_zh_tl
2570         \skip_vertical:N \c_zero_skip
2571         \c__sjtu_name_thesis_zh_tl

```

```

2572         \c__sjtu_name_auth_decl_zh_tl
2573     } ,
2574     bottom-skip = 12 bp
2575 },
2576 { auth / text }
2577 {
2578     format      = \zihao { -4 } \setbaselineskip { 24 bp } ,
2579     content     = \c__sjtu_auth_decl_text_zh_tl ,
2580     bottom-skip = 24 bp ,
2581     align      = normal
2582 },
2583 { auth / sign }
2584 {
2585     format      = \zihao { 4 } \setbaselineskip { 30 bp } ,
2586     content     =
2587     {
2588         \__sjtu_signature:N \c__sjtu_name_decl_author_zh_tl
2589         \hfill
2590         \__sjtu_signature:N \c__sjtu_name_decl_supervisor_zh_tl
2591         \skip_horizontal:n { 2 em } \hbox:n { }
2592     } ,
2593     bottom-skip = \c_zero_dim plus 1 fill ,
2594     align      = normal
2595 }
2596 }
2597 {
2598     \__sjtu_declare_component:nnn { copyright } #1
2599 }
2600 \__sjtu_declare_page:nn { copyright }
2601 {
2602     bookmark      = true ,
2603     bookmark-text = \c__sjtu_name_declaration_tl ,
2604     format        = \linespread { } \__sjtu_set_language_zh: ,
2605     prefix        = copyright ,
2606     components    =
2607     {
2608         orig / title, orig / text, orig / sign,
2609         auth / title, auth / text, auth / sign
2610     }
2611 }
2612 \msg_new:nnn { sjtutex } { require-pdfpages }
2613 {
2614     Add~"\token_to_str:N \usepackage{pdfpages}"~ in~ your~ preamble \\
2615     before~ inserting~ pages~ of~ external~ PDF.
2616 }
\copyrightpage 2617 \NewDocumentCommand \copyrightpage { 0{ } }
2618 {
2619     \bool_if:NF \g__sjtu_review_bool
2620     {
2621         \tl_if_blank:nTF {#1}
2622         { \UseInstance { sjtu } { copyright } }
2623         {
2624             \cs_if_exist:NTF \includepdf
2625             {
2626                 \bool_if:NTF \g__sjtu_openright_bool
2627                 { \cleardoublepage } { \clearpage }
2628                 \__sjtu_pdf_bookmark:nn { 0 } { \c__sjtu_name_declaration_tl }
2629                 \includepdf {#1}
2630             }
2631             {
2632                 \msg_warning:nn { sjtutex } { require-pdfpages }
2633                 \UseInstance { sjtu } { copyright }
2634             }
2635         }
2636     }
2637 }
2638 </thesis>

```

6.20 摘要

`style/keywords-format` 关键词排版样式。

```

2639 \keys_define:nn { sjtu / style }
2640   {
2641     keywords-format      .choice: ,
2642     keywords-format / plain .code:n =
2643       { \cs_set:Nn \__sjtu_keywords_format:n { \noindent { \bfseries ##1 } } } ,
2644     keywords-format / hang .code:n =
2645       { \cs_set:Nn \__sjtu_keywords_format:n { \@hangfrom { \bfseries ##1 } } } ,
2646     keywords-format      .initial:n = { plain }
2647   }

```

`abstract` 学位论文摘要环境。

`abstract*`

```

2648 <thesis>
2649 \DeclareDocumentEnvironment { abstract } { 0{ zh } +b }
2650   {
2651     \__sjtu_if_lang_valid:nTF {#1}
2652     {
2653       \use:c { __sjtu_set_language_ #1 : }
2654       \exp_args:Nv \SJTU@head { c__sjtu_name_abstract_ #1 _tl }
2655       #2
2656       \clist_if_empty:cF { l__sjtu_info_keywords_ #1 _clist }
2657       {
2658         \par \mode_leave_vertical: \par
2659         \__sjtu_keywords_format:n
2660         {
2661           \tl_use:c { c__sjtu_name_keywords_ #1 _tl }
2662           \tl_use:c { c__sjtu_name_info_sep_ #1 _tl }
2663         }
2664         \clist_use:cv { l__sjtu_info_keywords_ #1 _clist }
2665         { c__sjtu_name_item_sep_ #1 _tl }
2666         \par
2667       }
2668     }
2669     { \msg_error:nnn { sjtutex } { lang-validation } {#1} }
2670   } { }
2671 \DeclareDocumentEnvironment { abstract* } { 0{ zh } +b }
2672   {
2673     \__sjtu_if_lang_valid:nTF {#1}
2674     {
2675       \use:c { __sjtu_set_language_ #1 : }
2676       \exp_args:NNv \SJTU@head* { c__sjtu_name_abstract_ #1 _tl }
2677       #2
2678       \clist_if_empty:cF { l__sjtu_info_keywords_ #1 _clist }
2679       {
2680         \par \mode_leave_vertical: \par
2681         \__sjtu_keywords_format:n
2682         {
2683           \tl_use:c { c__sjtu_name_keywords_ #1 _tl }
2684           \tl_use:c { c__sjtu_name_info_sep_ #1 _tl }
2685         }
2686         \clist_use:cv { l__sjtu_info_keywords_ #1 _clist }
2687         { c__sjtu_name_item_sep_ #1 _tl }
2688         \par
2689       }
2690     }
2691     { \msg_error:nnn { sjtutex } { lang-validation } {#1} }
2692   } { }
2693 </thesis>

```

修复通用模板摘要段首缩进。

```

2694 <thesis>
2695 \bool_if:NT \g__sjtu_titlepage_bool
2696   { \__sjtu_appto_cmd:Nn \abstract { \par } }

```

通用模板摘要后添加关键词。

```

2697 \_sjtu_preto_cmd:Nn \endabstract
2698 {
2699   \clist_if_empty:NF \l__sjtu_info_keywords_clist
2700   {
2701     \par \mode_leave_vertical: \par
2702     \_sjtu_keywords_format:n
2703     {
2704       \c__sjtu_name_keywords_tl
2705       \c__sjtu_name_info_sep_tl
2706     }
2707     \clist_use:NV \l__sjtu_info_keywords_clist \c__sjtu_name_item_sep_tl
2708     \par
2709   }
2710 }
2711 </!thesis>

```

6.21 目录

`\tableofcontents`
`\tableofcontents*` 目录。

```

2712 \DeclareDocumentCommand \tableofcontents { s }
2713 {
2714   \IfBooleanTF {#1}
2715     { \SJTU@head* { \contentsname } }
2716     { \SJTU@head { \contentsname } }
2717   \group_begin:
2718     \cs_set:Npn \makebox [##1][##2]##3 { \, ##3 }
2719     \@starttoc { toc }
2720   \group_end:
2721 }

```

`\SJTU@listof` 图表索引。

```

\listoffigures
\listoffigures*
\listoftables
\listoftables*
2722 \NewDocumentCommand \SJTU@listof { m m s }
2723 {
2724   \IfBooleanTF {#3}
2725     { \SJTU@head* {#1} }
2726     { \SJTU@head {#1} }
2727   \group_begin:
2728     \cs_set:Npn \makebox [##1][##2]##3 { \, ##3 }
2729     \exp_args:Nv \@starttoc { ext@ #2 }
2730   \group_end:
2731 }
2732 \DeclareDocumentCommand \listoffigures { }
2733 { \SJTU@listof { \listfigurename } { figure } }
2734 \DeclareDocumentCommand \listoftables { }
2735 { \SJTU@listof { \listtablename } { table } }
2736 \tl_set:Nn \cftdotsep { 0.5 }
<|article> 2737 \tl_set:Nn \cftchapleader { \bfseries \cftdotfill { \cftdotsep } }
2738 <*thesis>
2739 \clist_map_inline:nn
2740 {
2741   { cft before chap skip } { 10 bp plus 1 pt } ,
2742   { cft chap numwidth } { 3.5 em } ,
2743   { cft sec indent } { 2 em } ,
2744   { cft sec numwidth } { 1.5 em } ,
2745   { cft subsec indent } { 4 em } ,
2746   { cft subsec numwidth } { 2.3 em }
2747 }
2748 { \skip_set:cn #1 }
2749 </thesis>

```

`_sjtu_update_cft_presnum:nn` 图表清单标题前添加名称。

```

\l__sjtu_cft_presnum_clist
2750 \clist_set:Nn \l__sjtu_cft_presnum_clist

```

```

2751 {
2752   { fig } { \figurename } ,
2753   { tab } { \tablename }
2754 }
2755 \cs_new:Npn \__sjtu_update_cft_presnum:nn #1#2
2756 {
2757   \tl_set:cn { cft #1 presnum } { #2 \c_space_tl }
2758   \skip_zero:c { cft #1 indent }
<article> 2759   \skip_set:cn { cft #1 numwidth } { 1.8 em }
<article> 2760   \skip_set:cn { cft #1 numwidth } { 2.8 em }
2761   \__sjtu_skip_add_to_wd:cv { cft #1 numwidth } { cft #1 presnum }
2762 }
2763 \ctex_at_end_preamble:n
2764 {
2765   \clist_map_inline:Nn \l__sjtu_cft_presnum_clist
2766     { \__sjtu_update_cft_presnum:nn #1 }
2767 }

```

6.22 预定义环境

abbreviation 缩略语对照表。

abbreviation*

```

2768 <*thesis>
2769 \NewDocumentEnvironment { abbreviation } { O{ \SJTU@abbrname } }
2770 {
2771   \chapter {#1}
2772   \tl_clear:N \SJTU@style@float@font
2773 } { }
2774 \NewDocumentEnvironment { abbreviation* } { O{ \SJTU@abbrname } }
2775 {
2776   \SJTU@head* {#1}
2777   \tl_clear:N \SJTU@style@float@font
2778 } { }

```

nomenclature 符号对照表。

nomenclature*

```

2779 \NewDocumentEnvironment { nomenclature } { O{ \SJTU@nomname } }
2780 {
2781   \chapter {#1}
2782   \tl_clear:N \SJTU@style@float@font
2783 } { }
2784 \NewDocumentEnvironment { nomenclature* } { O{ \SJTU@nomname } }
2785 {
2786   \SJTU@head* {#1}
2787   \tl_clear:N \SJTU@style@float@font
2788 } { }

```

acknowledgements 致谢, 盲审模式下隐藏致谢。

```

2789 \NewDocumentEnvironment { acknowledgements } { O{ \SJTU@ackname } +b }
2790 {
2791   \bool_if:NF \g__sjtu_review_bool
2792     {
2793       \SJTU@head {#1}
2794       #2
2795     }
2796 } { }

```

achievements 发表论文与学术成果。

bibliolist

bibliolist*

```

2797 \newcounter { SJTU@bib }
2798 \NewDocumentEnvironment { @bibliolist } { m }
2799 {
2800   \cs_if_exist_use:N \bibfont
2801   \list
2802     {
2803       \tl_if_blank:nTF {#1}

```

```

2804     { \hfill }
2805     { \@biblabel { \arabic{ SJTU@bib } } }
2806   }
2807   {
2808     \tl_if_blank:nTF {#1}
2809     {
2810       \skip_if_exist:NTF \bibhang
2811       { \dim_set_eq:NN \leftmargin \bibhang }
2812       { \dim_set:Nn \leftmargin { 1 em } }
2813       \dim_set:Nn \itemindent { - \leftmargin }
2814     }
2815     {
2816       \_sjtu_dim_set_to_wd:Nn \labelwidth { \@biblabel {#1} }
2817       \dim_set_eq:NN \leftmargin \labelwidth
2818       \dim_add:Nn \leftmargin { \labelsep }
2819     }
2820     \skip_if_exist:NTF \bibitemsep
2821     {
2822       \skip_set_eq:NN \itemsep \bibitemsep
2823       \skip_if_exist:NT \bibparsep
2824       { \skip_set_eq:NN \parsep \bibparsep }
2825     }
2826     {
2827       \skip_if_exist:NT \bibsep
2828       {
2829         \skip_set_eq:NN \itemsep \bibsep
2830         \skip_zero:N \parsep
2831       }
2832     }
2833     \@nmblisttrue
2834     \tl_set:Nn \@listctr { SJTU@bib }
2835     \cs_set:Npn \p@SJTU@bib { }
2836     \cs_set:Npn \theSJTU@bib { \arabic { SJTU@bib } }
2837   }
2838   \sloppy
2839   \int_set:Nn \clubpenalty { 4000 }
2840   \int_set_eq:NN \@clubpenalty \clubpenalty
2841   \int_set:Nn \widowpenalty { 4000 }
2842   \char_set_sfcode:nn { \. } { 1000 }
2843 }
2844 {
2845   \cs_set:Npn \@noitemerr
2846   { \msg_warning:nnn { sjtutex } { empty-environment } { bibliolist } }
2847   \endlist
2848 }
2849 \msg_new:nnn { sjtutex } { empty-environment }
2850 { Empty~`#1'~ environment. }
2851 \bool_new:N \l__sjtu_achievements_bool
2852 \NewDocumentEnvironment { achievements } { 0 { \SJTU@achvname } }
2853 {
2854   \SJTU@head {#1}
2855   \setcounter { SJTU@bib } { 0 }
2856   \bool_set_true:N \l__sjtu_achievements_bool
2857 } { }
2858 \NewDocumentEnvironment { bibliolist } { m +b }
2859 {
2860   \bool_if:NF \l__sjtu_achievements_bool
2861   {
2862     \msg_error:nnnn { sjtutex } { environment-validation }
2863     { bibliolist } { achievements }
2864   }
2865   \bool_if:NF \g__sjtu_review_bool
2866   {
2867     \cs_set:Npn \@noitemerr { }
2868     \begin { @bibliolist } {#1}
2869     #2
2870     \end { @bibliolist }

```



```

2871     }
2872 } { }
2873 \NewDocumentEnvironment { bibliolist* } { m +b }
2874 {
2875   \bool_if:NF \l__sjtu_achievements_bool
2876   {
2877     \msg_error:nnnn { sjtutex } { environment-validation }
2878     { bibliolist* } { achievements }
2879   }
2880   \bool_if:NT \g__sjtu_review_bool
2881   {
2882     \cs_set:Npn \@noitemerr { }
2883     \begin { @bibliolist } {#1}
2884     #2
2885     \end { @bibliolist }
2886   }
2887 } { }
2888 \msg_new:nnn { sjtutex } { environment-validation }
2889 { `#1' is only valid in `#2' environment. }

```

resume 简历。

```

2890 \NewDocumentEnvironment { resume } { O{ \SJTU@resumename } +b }
2891 {
2892   \bool_if:NF \g__sjtu_review_bool
2893   {
2894     \SJTU@head {#1}
2895     #2
2896   }
2897 } { }

```

digest 大摘要。

```

2898 \NewDocumentEnvironment { digest } { O{ en } +b }
2899 {
2900   \__sjtu_if_lang_valid:nTF {#1}
2901   {
2902     \AtEndDocument
2903     {
2904       \use:c { __sjtu_set_language_ #1 : }
2905       \bool_if:NTF \g__sjtu_openright_bool
2906       { \cleardoublepage } { \clearpage }
2907       \pagenumbering { roman }
2908       \cs_gset:Nn \__sjtu_thepage: { \arabic { page } }
2909       \cs_gset_eq:NN \addcontentsline \use_none:nnn
2910       \clist_map_inline:Nn \l__sjtu_counter_without_chapter_clist
2911       {
2912         \counterwithout {##1} { chapter }
2913         \setcounter {##1} { 0 }
2914       }
2915       \__sjtu_head_aux_s:nx { \SJTU@digestname }
2916       {
2917         \exp_not:N \MakeUppercase
2918         { \exp_not:v { l__sjtu_info_title_ #1 _t1 } }
2919       }
2920     #2
2921   }
2922 }
2923 { \msg_error:nnn { sjtutex } { lang-validation } {#1} }
2924 } { }
2925 </thesis>

```

6.23 设置接口

\sjtusetup 用户设置接口。

```

2926 \NewDocumentCommand \sjtusetup { } { \keys_set:nn { sjtu } }

```

定义元(meta)键值对。

```

2927 \keys_define:nn { sjtu }
2928 {
2929   style .meta:nn = { sjtu / style } {#1} ,
2930   info .meta:nn = { sjtu / info } {#1} ,
2931   name .meta:nn = { sjtu / name } {#1}
2932 }

```

兼容 sjtuthesis 旧接口。

```

2933 <!*thesis>
2934 \keys_define:nn { sjtu / info }
2935 {
2936   title .meta:n = { zh / title = {#1} } ,
2937   title* .meta:n = { en / title = {#1} } ,
2938   display-title .meta:n = { zh / display-title = {#1} } ,
2939   display-title* .meta:n = { en / display-title = {#1} } ,
2940   subject .meta:n = { zh / subject = {#1} } ,
2941   subject* .meta:n = { en / subject = {#1} } ,
2942   keywords .meta:n = { zh / keywords = {#1} } ,
2943   keywords* .meta:n = { en / keywords = {#1} } ,
2944   author .meta:n = { zh / author = {#1} } ,
2945   author* .meta:n = { en / author = {#1} } ,
2946   supervisor .meta:n = { zh / supervisor = {#1} } ,
2947   supervisor* .meta:n = { en / supervisor = {#1} } ,
2948   assoc-supervisor .meta:n = { zh / assoc-supervisor = {#1} } ,
2949   assoc-supervisor* .meta:n = { en / assoc-supervisor = {#1} } ,
2950   co-supervisor .meta:n = { zh / co-supervisor = {#1} } ,
2951   co-supervisor* .meta:n = { en / co-supervisor = {#1} } ,
2952   degree .meta:n = { zh / degree = {#1} } ,
2953   degree* .meta:n = { en / degree = {#1} } ,
2954   department .meta:n = { zh / department = {#1} } ,
2955   department* .meta:n = { en / department = {#1} } ,
2956   major .meta:n = { zh / major = {#1} } ,
2957   major* .meta:n = { en / major = {#1} } ,
2958   fund .meta:n = { zh / fund = {#1} } ,
2959   fund* .meta:n = { en / fund = {#1} } ,
2960   display-date .meta:n = { zh / date = {#1} } ,
2961   display-date* .meta:n = { en / date = {#1} }
2962 }
2963 \keys_define:nn { sjtu / name }
2964 {
2965   abbreviation .meta:n = { abbr = {#1} } ,
2966   nomenclature .meta:n = { nom = {#1} } ,
2967   acknowledgements .meta:n = { ack = {#1} } ,
2968   publications .meta:n = { achv = {#1} } ,
2969   achievements .meta:n = { achv = {#1} }
2970 }
2971 </!*thesis>

```

\subject
\keywords 通用模板新接口。

```

2972 <!*thesis>
2973 \NewDocumentCommand \subject { m }
2974 { \keys_set:nn { sjtu / info } { subject = {#1} } }
2975 \NewDocumentCommand \keywords { m }
2976 { \keys_set:nn { sjtu / info } { keywords = {#1} } }
2977 </!*thesis>

```

6.24 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。

6.24.1 hyperref 宏包

```

2978 \ctex_at_end_package:n { hyperref }
2979 {
2980   \hypersetup
2981   {
2982     linktoc           = all,
2983     bookmarksdepth   = 2,
2984     bookmarksnumbered = true,
2985     bookmarksopen    = true,
2986     bookmarksopenlevel = 1,
2987     unicode          = true,
2988     psdextra         = true,
2989     breaklinks       = true,
2990     pdfdisplaydoctitle = true
2991   }
2992   \int_new:N \g__sjtu_bookmark_int
2993   \cs_gset_protected:Npn \__sjtu_pdf_bookmark:nn #1#2
2994   {
2995     \phantomsection
2996     \int_gincr:N \g__sjtu_bookmark_int
2997     \pdfbookmark [#1] {#2}
2998     { sjtubookmark. \int_use:N \g__sjtu_bookmark_int }
2999   }
3000   \cs_gset_eq:NN \__sjtu_phantom_section: \phantomsection
3001   \pdfstringdefDisableCommands
3002   {
3003     \cs_set_eq:NN \ \ \prg_do_nothing:
3004     \cs_set_eq:NN \quad \c_empty_tl
3005     \cs_set_eq:NN \qquad \c_empty_tl
3006     \cs_set_eq:NN \hspace \use_none:n
3007   }
3008   \ctex_after_end_preamble:n
3009   {
3010     \hypersetup
3011     {
3012 <*thesis>
3013         pdftitle   = \l__sjtu_info_title_zh_tl ,
3014         pdfauthor  = \l__sjtu_info_author_zh_tl ,
3015         pdfsubject = \l__sjtu_info_subject_zh_tl ,
3016         pdfkeywords = \l__sjtu_info_keywords_zh_clist
3017 </thesis>
3018 <!*thesis>
3019         pdftitle   = \@title ,
3020         pdfauthor  = \@author ,
3021         pdfsubject = \l__sjtu_info_subject_tl ,
3022         pdfkeywords = \l__sjtu_info_keywords_clist
3023 </!thesis>
3024     }
3025   }
3026 }

```

6.24.2 threeparttable 宏包

```

3027 \ctex_at_end_package:n { threeparttable }
3028 { \tl_put_right:Nn \TPNoteSettings { \footnotesize } }

```

6.24.3 longtable 宏包

```

3029 \ctex_at_end_package:n { longtable }
3030 { \AtBeginEnvironment { longtable } { \SJTU@style@float@font } }

```

6.24.4 amsthm 宏包和 ntheorem 宏包

```

3031 \cs_new_protected:Nn \__sjtu_new_theorems:
3032 {
3033   \clist_map_inline:nn
3034   {
3035     assumption, axiom, conjecture, corollary, definition, example,

```

```

3036     exercise, lemma, problem, proposition, theorem
3037   }
<article> 3038   { \exp_args:Nnv \newtheorem {##1} { c__sjtu_name_ ##1 _tl } [ chapter ] }
<article> 3039   { \exp_args:Nnv \newtheorem {##1} { c__sjtu_name_ ##1 _tl } }
3040   \clist_map_inline:nn
3041     { remark, solution }
3042     { \exp_args:NNnv \newtheorem* {##1} { c__sjtu_name_ ##1 _tl } }
3043 }

```

amsthm 宏包。

```

3044 \ctex_at_begin_package:nn { amsthm }
3045 {
3046   \cs_if_exist:NT \openbox
3047   {
3048     \cs_new_eq:NN \__sjtu_save_openbox: \openbox
3049     \cs_undefine:N \openbox
3050   }
3051 }
3052 \ctex_at_end_package:nn { amsthm }
3053 {
3054   \__sjtu_cs_provide_eq:NN \QED \openbox
3055   \cs_if_exist:NT \__sjtu_save_openbox:
3056     { \cs_set_eq:NN \openbox \__sjtu_save_openbox: }
3057   \tl_set:Nn \qedsymbol { \ensuremath { \QED } }
3058   \RenewDocumentEnvironment { proof } { O{ \proofname } }
3059     {
3060       \par \pushQED { \qed }
3061       \normalfont \dim_zero:N \topsep
3062       \trivlist
3063       \item
3064         [
3065           \skip_horizontal:N \labelsep
3066           \bfseries \CJKsffamily #1 \@addpunct { \enskip }
3067         ]
3068       \ignorespaces
3069     }
3070     { \popQED \endtrivlist \@endpefalse }
3071   \newtheoremstyle { sjtu }
3072     { } { } { \normalfont } { } { \bfseries \CJKsffamily } { } { \ccwd } { }
3073   \theoremstyle { sjtu }
3074   \__sjtu_new_theorems:
3075 }

```

ntheorem 宏包。

```

3076 \ctex_at_end_package:nn { ntheorem }
3077 {
3078   \__sjtu_cs_provide_eq:NN \QED \c_empty_tl
3079   \theoremheaderfont { \bfseries \CJKsffamily }
3080   \theorembodyfont { \normalfont }
3081   \theoremseparator { \enskip }
3082   \theoremsymbol { \ensuremath { \QED } }
3083   \qedsymbol { \ensuremath { \QED } }
3084   \newtheorem* { proof } { \proofname }
3085   \theoremsymbol { }
3086   \__sjtu_new_theorems:
3087 }

```

6.24.5 algorithm 宏包和 algorithm2e 宏包

```

3088 \cs_new_protected:Npn \__sjtu_newlistof:nnnnn #1#2#3#4#5
3089 {
3090   \exp_args:Nnv \newlistentry {#2} { ext@ #3 } { 0 }
3091   \exp_args:Ne \newcounter { \tl_use:c { ext@ #3 } depth }
3092   \exp_args:Ne \setcounter { \tl_use:c { ext@ #3 } depth } { 1 }
3093   \clist_put_right:Nn \l__sjtu_cft_presnum_clist { {#2} {#4} }
3094   \cs_set_eq:cc { l@ #3 } { l@ #2 }
3095   \exp_args:Nc \DeclareDocumentCommand { listof #1 s } { }
3096     { \SJTU@listof {#5} {#3} }

```

```

<article> 3097 \SJTU@counterwithin { #3 } { chapter }
<thesis> 3098 \clist_put_right:Nn \l__sjtu_counter_without_chapter_clist {#3}
3099 }

```

algorithm 宏包。

```

3100 \ctex_at_end_package:nn { algorithm }
3101 {
3102 \tl_set:Nn \fname@algorithm { \SJTU@algorithmname }
3103 \tl_set:Nn \listalgorithmname { \SJTU@listalgorithmname }
3104 \__sjtu_newlistof:nnnnn { algorithm } { alg } { algorithm }
3105 { \fname@algorithm } { \listalgorithmname }
3106 }

```

algorithm2e 宏包。

```

<article> 3107 \ctex_at_begin_package:nn { algorithm2e }
<article> 3108 { \cs_set_eq:NN \__sjtu_save_chapter:w \@chapter }
3109 \ctex_at_end_package:nn { algorithm2e }
3110 {
<article> 3111 \cs_set_eq:NN \@chapter \__sjtu_save_chapter:w
3112 \SetAlgorithmName { \SJTU@algorithmname }
3113 { \SJTU@algorithmname }
3114 { \SJTU@listalgorithmname }
3115 \SetAlgoCaptionSeparator { \enskip }
3116 \__sjtu_newlistof:nnnnn { algorithm } { alg } { algocf }
3117 { \algorithmcfname } { \listalgorithmcfname }
3118 \ctex_patch_cmd:Nnn \algocf@latexcaption
3119 { \addcontentsline }
3120 { \caption@iflist { \addcontentsline } { \@gobblethree } }
3121 }

```

6.24.6 nomencl 宏包

```

3122 \ctex_at_end_package:nn { nomencl }
3123 { \tl_set:Nn \nomname { \SJTU@nomname } }

```

6.24.7 translations 宏包

```

3124 \ctex_at_end_package:nn { translations }
3125 {
3126 \DeclareLanguage { chinese }
3127 \DeclareLanguageAlias { Chinese } { chinese }
3128 }

```

6.24.8 siunitx 宏包

```

3129 \ctex_at_end_package:nn { siunitx }
3130 {
3131 \RequirePackage { translations }
3132 \DeclareTranslation { Chinese } { and } { 和 }
3133 \DeclareTranslation { Japanese } { and } { と }
3134 \DeclareTranslation { Chinese }
3135 { to~(numerical~range) } { \textasciitilde }
3136 \DeclareTranslation { Japanese }
3137 { to~(numerical~range) } { \textasciitilde }
3138 \IfPackageAtLeastTF { siunitx } { 2021/05/17 } { }
3139 {
3140 \DeclareTranslation { English } { to~(numerical~range) } { to }
3141 \DeclareTranslation { German } { to~(numerical~range) } { bis }
3142 \keys_set:nn { siunitx }
3143 {
3144 list-final-separator =
3145 {
3146 \ifmmode \ \else \space \fi
3147 \text { \GetTranslation { and } }
3148 \ifmmode \ \else \space \fi
3149 } ,
3150 list-pair-separator =
3151 {

```

```

3152         \ifmmode \ \else \space \fi
3153         \text { \GetTranslation { and } }
3154         \ifmmode \ \else \space \fi
3155     } ,
3156     range-phrase =
3157     {
3158         \ifmmode \ \else \space \fi
3159         \text { \GetTranslation { to~(numerical~range) } }
3160         \ifmmode \ \else \space \fi
3161     }
3162 }
3163 }
3164 }
3165 </class>

```

6.25 名称配置

```

3166 <*name>
3167 <zhja>
3168 \clist_map_inline:nn
3169 {
3170     { year } { 年 } ,
3171     { month } { 月 } ,
3172     { day } { 日 }
3173 }
<zh> 3174 { \__sjtu_define_name:nnn { zh } #1 }
<ja> 3175 { \__sjtu_define_name:nnn { ja } #1 }
3176 </zhja>
3177 <*en>
3178 \clist_const:Nn \c__sjtu_name_month_en_clist
3179 {
3180     January, February, March, April, May, June,
3181     July, August, September, October, November, December
3182 }
3183 </en>
3184 <*de>
3185 \clist_const:Nn \c__sjtu_name_month_de_clist
3186 {
3187     Januar, Februar, März, April, Mai, Juni,
3188     Juli, August, September, Oktober, November, Dezember
3189 }
3190 </de>
3191 <*thesis>
3192 <zh>
3193 \__sjtu_define_symbol:nn { white_square } { "25A1 }
3194 \__sjtu_define_name_from_clist:nnnn { zh }
3195 { degree_level } { \g__sjtu_thesis_type_int }
3196 { 学士, 硕士, 博士 }
3197 </zh>
3198 <*en>
3199 \__sjtu_define_name_from_clist:nnnn { en }
3200 { degree_level } { \g__sjtu_thesis_type_int }
3201 { Bachelor, Master, Doctor }
3202 </en>
3203 <*de>
3204 \__sjtu_define_name_from_clist:nnnn { de }
3205 { degree_level } { \g__sjtu_thesis_type_int }
3206 { Bachelor, Master, Doktor }
3207 </de>
3208 <*ja>
3209 \__sjtu_define_name_from_clist:nnnn { ja }
3210 { degree_level } { \g__sjtu_thesis_type_int }
3211 { 学士, 修士, 博士 }
3212 </ja>
3213 </thesis>
3214 <*zh>
3215 \clist_map_inline:nn

```

```

3216 {
3217 <*thesis>
3218 { univ          } { 上海交通大学          } ,
3219 { author        } { 姓名                    } ,
3220 { id            } { 学号                    } ,
3221 { supervisor    } { 导师                      } ,
3222 { assoc_supervisor } { 副导师                    } ,
3223 { department    } { 院系                      } ,
3224 { co_supervisor  } { 联合导师                    } ,
3225 { major         } { 学科 / 专业                } ,
3226 { degree       } { 申请学位                    } ,
3227 { thesis       } { 学位论文                    } ,
3228 { title_page   } { 题名页                      } ,
3229 { declaration  } { 原创性声明及使用授权书 } ,
3230 { orig_decl    } { 原创性声明                    } ,
3231 { auth_decl    } { 使用授权书                    } ,
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3293 { assoc_supervisor } { 副指導教員 } ,
3294 { co_supervisor } { 共同指導 } ,
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3307 <*thesis>
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3309 \tl_const:Nn \c__sjtu_orig_decl_text_zh_tl
3310 {
3311 本人郑重声明：所呈交的学位论文，是本人在导师的指导下，独立进行研究工作
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3314 体，均已在文中以明确方式标明。本人完全知晓本声明的法律后果由本人承
3315 担。
3316 }
3317 \tl_const:Nn \c__sjtu_auth_decl_text_zh_tl
3318 {
3319 本人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
3320 论文被查阅和借阅。 \par
3321 \vskip 6 bp
3322 \noindent
3323 本学位论文属于： \par
3324 { \c__sjtu_symbol_white_square_tl } \textbf { 公开论文 } \par
3325 { \c__sjtu_symbol_white_square_tl } \textbf { 内部论文 } ,
3326 保密 { \c__sjtu_symbol_white_square_tl } ~ 1~ 年 /
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3335 过保密期后适用本授权书。 \par
3336 \hspace { 6 em } (请在以上方框内选择打 “ \ensuremath { \checkmark } ” )
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3339 {
3340 签名： \\
3341 日期： \hspace { \stretch { 3 } } 年
3342 \hspace { \stretch { 2 } } 月
3343 \hspace { \stretch { 2 } } 日
3344 }
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```



```

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```

版本历史

v2.0	(2021/09/10 – 2023/03/23)	v2.0.2	(2023/03/31 – 2023/04/01)
General: sjtuthesis 类型选项移除 course, 不再支持课程论文。	16	General: 区分 dim 与 skip 类型变量。	21
abstract 环境新增指定语言的可选参数。	61	延迟载入字体配置, 修复 unicode-math 设置不生效的问题。	39
digest 环境新增指定语言的可选参数。	65	标题页日期底部增加空白。	56
不再自动载入 pdfpages 宏包。	60	v2.0.3	(2023/04/08 – 2023/09/25)
使用 assoc-supervisor 键表示副导师, 使用 co-supervisor 键表示联合导师。	50	General: 学位论文页面纵向顶部对齐。	42
使用语言代码前缀区别不同语种的 sjtu/info 键。	50	新增 libertinus 字体配置。	26
启用新版封面。	56	更新学位论文初始英文主题。	51
应用 L ^A T _E X3 重构代码。	1	添加 siunitx 本地化支持。	69
新增文档类 sjtuarticle 和 sjtureport。	1	移除 listings 宏包预设。	66
添加 display-date 键。	50	v2.1	(2023/10/24 – 2024/01/10)
添加 lineskip 文档类选项。	17	General: abstract 环境添加目录条目, abstract* 环境对应修改为不添加目录条目。	61
添加 math-style 文档类选项, 默认值为 ISO。	17	\tableofcontents 添加目录条目, \tableofcontents* 对应修改为不添加目录条目。	62
添加 subject 键。	50	同步 L ^A T _E X 2020/10/01, 无需显式调用 expl3 和 xparse 宏包。	15
移除 summary 环境。	63	新增 style/equation-font 选项。	46
简化 sjtu/name 中键的名称: abbr, nom, ack, achv。	40	新增 style/indent-first 选项。	45
语言选项新增 de, 添加德文模板。	16	新增 style/keywords-format 选项。	61
语言选项新增 ja, 添加日文模板。	16	新增 style/num-sep, style/theorem-num-sep 选项。	47
重新制定 sjtu/style 域中的接口。	66	更新题注格式。	47
v2.0.1	(2023/03/31)	标题页信息栏改用表格实现。	56
General: 插图、表格和算法等索引不缩进。	62	添加 baselineskip 文档类选项, 替换原 lineskip 选项。	17
调整插图、表格和算法等索引编号宽度。	62		

代码索引

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

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