

mynsfc — 国家自然科学基金申请书正文模板*

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摘 要

用于自然科学基金申请书正文部分的撰写。

1 使用说明

参见样例文件 `examples/my-nsfc-proposal.tex`。

2 实现

```
<*class>
1%% Options
2\newif\ifmynsfc@subfig\mynsfc@subfigfalse
3\newif\ifmynsfc@arabicpart\mynsfc@arabicpartfalse
4\DeclareOption{subfig}{\mynsfc@subfigtrue}
5\DeclareOption{arabicpart}{\mynsfc@arabicparttrue}
6\ExecuteOptions{}
7\ProcessOptions
8%% Load default class
9\LoadClass[a4paper,fleqn]{article}

10%% Load required packages
11\RequirePackage{titlesec}
12\RequirePackage{marvosym}
13\RequirePackage{bm,amsmath,amssymb}
14\RequirePackage{paralist}
15\RequirePackage{graphicx}
16\ifmynsfc@subfig
17\RequirePackage[config]{subfig}
18\else
19\RequirePackage{subcaption}
20\fi
21\RequirePackage{xcolor}
22\RequirePackage{calc}
23\RequirePackage{hyperref}
24\hypersetup{%
25  breaklinks=true,
26  colorlinks=true,
27  allcolors=black,
28  pdfpagelabels}
29\urlstyle{same}

30%% Load and setup package biblatex
31\RequirePackage[backend=biber,
32                url=true,
33                isbn=false,
34                defernumbers=true,
```

* 此文档描述的模板版本为 v1.01, 最后修改日期为 2016/07/11.

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```

35 style=ieee] {biblatex}
36
37 \appto{\bibfont}{\wuhao}
38 \defbibheading{reftype} [\bibname] {\subsection*{#1}}
39 \defbibheading{cvtype} [\bibname] {\paragraph{#1}}
40 \defbibfilter{conference} {type=inproceedings or type=incollection}
41
42 \RequirePackage{xpatch} % or use http://tex.stackexchange.com/a/40705
43
44 \@ifpackagelater{biblatex}{2016/03/01}
45 {
46 \newcommand*{\list@bold@authors}{}
47 \newcommand{\initauthors}[1]{
48 \renewcommand*{\list@bold@authors}{}
49 \forcsvlist{\listadd\list@bold@authors}{#1}}
50
51 \newboolean{bold}
52 \renewcommand*{\mkbibnamefamily}[1]{\ifthenelse{\boolean{bold}}{\textbf{#1}}{#1}}
53 \renewcommand*{\mkbibnamegiven}[1]{\ifthenelse{\boolean{bold}}{\textbf{#1}}{#1}}
54
55 \newbibmacro{name:bold}{%
56 \setboolean{bold}{false}%
57 \def\do##1{\iffieldequalstr{hash}{##1}{\setboolean{bold}{true}\listbreak}}}%
58 \dolistloop{\list@bold@authors}%
59 }
60
61 \xpretobibmacro{name:family}{\begingroup\usebibmacro{name:bold}}{}{}{}{}
62 \xpretobibmacro{name:given-family}{\begingroup\usebibmacro{name:bold}}{}{}{}{}
63 \xpretobibmacro{name:family-given}{\begingroup\usebibmacro{name:bold}}{}{}
64 % \xpretobibmacro{name:delim}{\begingroup\normalfont}}{}{}
65
66 \xapptobibmacro{name:family}{\endgroup}}{}{}{}{}
67 \xapptobibmacro{name:given-family}{\endgroup}}{}{}{}{}
68 \xapptobibmacro{name:family-given}{\endgroup}}{}{}{}{}
69 % \xapptobibmacro{name:delim}{\endgroup}}{}{}
70 }
71 {
72 \newbibmacro{name:bold}[2]{%
73 \def\do##1{\ifstrequal{#1, #2}{##1}{\bfseries\listbreak}}}%
74 \dolistloop{\boldnames}}
75 \newcommand*{\boldnames}{}
76
77 \xpretobibmacro{name:last}{\begingroup\usebibmacro{name:bold}{#1}{#2}}{}{}
78 \xpretobibmacro{name:first-last}{\begingroup\usebibmacro{name:bold}{#1}{#2}}{}{}
79 \xpretobibmacro{name:last-first}{\begingroup\usebibmacro{name:bold}{#1}{#2}}{}{}
80 \xpretobibmacro{name:delim}{\begingroup\normalfont}}{}{}
81
82 \xapptobibmacro{name:last}{\endgroup}}{}{}
83 \xapptobibmacro{name:first-last}{\endgroup}}{}{}
84 \xapptobibmacro{name:last-first}{\endgroup}}{}{}
85 \xapptobibmacro{name:delim}{\endgroup}}{}{}
86 }

```

\dummyMacro This is a dummy macro. If it did anything, we'd describe its implementation here.

```

87 % \begin{macrocode}
88 %
89 \newcommand{\dummyMacro}{}

90 %% Setup Chinese fonts with xeCJK
91 \RequirePackage[AutoFakeBold]{xeCJK}
92 \def\CJK@null{\kern\CJKnullspace\Unicode{48}{7}\kern\CJKnullspace}
93 \punctstyle{quanjiao}
94 \defaultfontfeatures{Mapping=tex-text} % after fontspec
95 \setCJKmainfont{仿宋 _GB2312}

```

```

96 \setCJKsansfont{SimHei}
97 \setCJKmonofont{仿宋_GB2312}
98 \setCJKfamilyfont{song}{仿宋_GB2312}
99 \setCJKfamilyfont{hei}{SimHei}
100 \setCJKfamilyfont{kai}{KaiTi}
101 \setmainfont{Times New Roman}
102 \setmonofont{Courier Std}

\kai Define commands to select Chinese fonts.
\kaiti 103 \newcommand{\kai}{\CJKfamily{kai}} % 仿宋体
\song 104 \newcommand{\song}{\CJKfamily{song}} % 宋体
\songti 105 \newcommand{\hei}{\CJKfamily{hei}} % 黑体
\hei 106 \def\kaiti{\kai}
\heiti 107 \def\songti{\song}
108 \def\heiti{\hei}

109 \newlength\mysnfc@linespace
110 \newcommand{\mysnfc@choosefont}[2]{%
111 \setlength{\mysnfc@linespace}{#2*\real{#1}}%
112 \fontsize{#2}{\mysnfc@linespace}\selectfont}
113 \def\mysnfc@define@fontsize#1#2{%
114 \expandafter\newcommand\csname #1\endcsname[1][\baselinestretch]{%
115 \mysnfc@choosefont{##1}{#2}}
116 \mysnfc@define@fontsize{chuhao}{42bp}
117 \mysnfc@define@fontsize{xiaochu}{36bp}
118 \mysnfc@define@fontsize{yihao}{26bp}
119 \mysnfc@define@fontsize{xiaoyi}{24bp}
120 \mysnfc@define@fontsize{erhao}{22bp}
121 \mysnfc@define@fontsize{xiaoer}{18bp}
122 \mysnfc@define@fontsize{sanhao}{16bp}
123 \mysnfc@define@fontsize{xiaosan}{15bp}
124 \mysnfc@define@fontsize{sihao}{14bp}
125 \mysnfc@define@fontsize{banxiaosi}{13bp}
126 \mysnfc@define@fontsize{xiaosi}{12bp}
127 \mysnfc@define@fontsize{dawu}{11bp}
128 \mysnfc@define@fontsize{wuhao}{10.5bp}
129 \mysnfc@define@fontsize{xiaowu}{9bp}
130 \mysnfc@define@fontsize{liuhao}{7.5bp}
131 \mysnfc@define@fontsize{xiaoliu}{6.5bp}
132 \mysnfc@define@fontsize{qihao}{5.5bp}
133 \mysnfc@define@fontsize{bahao}{5bp}

134 % Define page layout
135 \setlength{\textwidth}{\paperwidth}
136 \setlength{\textheight}{\paperheight}
137 \setlength{\marginparwidth}{0mm}
138 \setlength{\marginparsep}{0mm}
139 \addtolength{\textwidth}{-50mm}
140 \setlength{\oddsidemargin}{0mm}
141 \setlength{\evensidemargin}{\oddsidemargin}
142 \setlength{\headheight}{20pt}
143 \setlength{\topskip}{0mm}
144 \setlength{\skip\footins}{15pt}
145 \setlength{\topmargin}{-15mm}
146 \setlength{\footskip}{13mm}
147 \setlength{\headsep}{6mm}
148 \addtolength{\textheight}{-50mm}
149 \setlength{\parskip}{0pt \@plus2pt \@minus0pt}

\normalsize Redefine command
150 \renewcommand\normalsize{%
151 \@setfontsize\normalsize{12bp}{20bp}
152 \abovedisplayskip=10bp \@plus 2bp \@minus 2bp
153 \abovedisplayskip=10bp \@plus 2bp \@minus 2bp

```

```

154 \belowdisplayskip=\abovedisplayskip
155 \belowdisplayshortskip=\abovedisplayshortskip

156 % Define page styles
157 \def\ps@mynsfc@empty{%
158 \let\@oddhead\@empty%
159 \let\@evenhead\@empty%
160 \let\@oddfoot\@empty%
161 \let\@evenfoot\@empty}

hcomment Dimmed text used as hint after section titles.
162 \newenvironment{hcomment}{\vskip-3pt\color{gray}}{\vskip6pt}

\figurename Translate English to Chinese.
\tablename 163 \renewcommand{\figurename}{图}
\contentsname 164 \renewcommand{\tablename}{表}
165 \renewcommand{\contentsname}{内容目录}

166 %
167 \DeclareCaptionLabelFormat{mynsfc@cap}{\wuhao#1\rmfamily#2}
168 \DeclareCaptionLabelSeparator{mynsfc@sep}{\hspace{1em}}
169 \DeclareCaptionFont{mynsfc@capfont}{\wuhao}
170 \captionsetup{labelformat=mynsfc@cap,
171 labelsep=mynsfc@sep,
172 font=mynsfc@capfont,
173 justification=centering}

CJKindent Indent with two Chinese full spaces.
174 %
175 \newlength\mynsfc@CJK@twochars
176 \newcommand{\mynsfc@unicode}[2]{\char\numexpr#1*256+#2\relax}
177 \def\mynsfc@CJK@space{\mynsfc@unicode{48}{7}}
178 \def\CJKindent{%
179 \settowidth\mynsfc@CJK@twochars{\mynsfc@CJK@space\mynsfc@CJK@space}%
180 \parindent\mynsfc@CJK@twochars}

\maketitle

\part ommands to format several levels of titles (part, section, subsection).
\section
\subsection 181 \ifmynsfc@arabicpart%
\subsubsection 182 \renewcommand{\thepart}{\arabic{part}.}
183 \titleformat{\part}{\heiti\sanhao}{\thepart}{1ex}{}
184 \renewcommand{\thesection}{\arabic{section}}
185 \renewcommand{\thesubsection}{\Alph{subsection}}
186 \else%
187 \def\nsfc@CJKnumber#1{\ifcase#1{零}\or%
188 {一}\or{二}\or{三}\or{四}\or{五}\or%
189 {六}\or{七}\or{八}\or{九}\or{十}\or%
190 {十一}\or{十二}\or{十三}\or{十四}\or{十五}\or%
191 {十六}\or{十七}\or{十八}\or{十九}\or{二十}\fi}
192 \renewcommand{\thepart}{(\nsfc@CJKnumber{c@part})}
193 \titleformat{\part}{\heiti\sanhao}{\thepart}{0ex}{}
194 \renewcommand{\thesection}{\arabic{section}.}
195 \renewcommand{\thesubsection}{\arabic{section}.\arabic{subsection}}
196 \fi
197
198 \titlespacing{\part}{0ex}{4ex}{2ex}
199
200 @addtoreset{section}{part}
201 \titleformat{\section}{\heiti\xiaosan}{\thesection}{0.25em}{}
202 \titlespacing{\section}{0em}{4ex}{2ex}
203
204 \titleformat{\subsection}{\hei\sihao}{\thesubsection}{0.25em}{}
205 \titlespacing{\subsection}{0em}{2ex}{1ex}

```

```

206
207 \titleformat{\subsubsection}{\heiti\banxiaosi}{\thesubsubsection}{0.25em}{}
208 \titlespacing{\subsubsection}{0em}{2ex}{1ex}

209 \let\mysfcbegindocumenthook\@begindocumenthook
210 \let\mysfcb@enddocumenthook\@enddocumenthook
211 \def\AtBeginDocument{\g@addto@macro\mysfcbegindocumenthook}
212 \def\AtEndDocument{\g@addto@macro\mysfcb@enddocumenthook}
213 \def\@begindocumenthook{\mysfcbegindocumenthook}
214 \def\@enddocumenthook{\mysfcb@enddocumenthook}
215 \AtBeginDocument{\ps@mysfcb@empty\CJKindent}
216 \endinput
217 \end{class}

```

3 Change History

```

v1.00
  General: First public release . . . . . 1
  Author highlight with latest biblatex . . . . . 1
  Revised command maketitle . . . . . 1
v1.01
  General: Added an option arabicpart . . . . . 1

```

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Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

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