How to use class files for academic conference proceedings

Information System Operation Committee　(Mathematical Society of Japan)*

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Contents

1　Introduction

This is a simple documentation of class file msjproc.cls version 2.0.2 for the abstract collection of the Mathematical Society of Japan Annual Meeting and the Autumn General Subcommittee[1].

This class file is intended to provide a standard template for creating academic conference proceedings. If you follow the format of the abstract [2], you will not necessarily be required to write the proceedings.

1.1　Class file specifications

- It conforms to the Mathematical Society of Japan Abstract Form (revised in October 2011).

$$
\begin{aligned}
\text{Paper size} &: \text{A4 (width 210 mm} \times \text{height 297 mm)} \\
\text{Body size} &: \text{Width 155mm} \times \text{Height 247mm} \\
\text{Extra White} &: \text{Left and right margins 27.5mm,} \\
&\quad\ \text{Top and bottom margins 25mm} \\
\text{Title width} &: \text{Within 135mm} \\
\text{Font size} &: \text{12pt} \\
\text{Page number} &: \text{None}
\end{aligned}
$$

- It works with pdfLaTeX, pLaTeX, upLaTeX, LuaLaTeX and XƎLaTeX. Japanese mode is not supported with pdfLaTeX and XƎLaTeX.
- It works with TeX system 2018 or later. If you are using the system before 2018, please use msjproc version 1.0.1.

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[1] This document itself is also created using the class file msjproc.cls with [english] option.

1.2 Download and install

You can download the archive file of the conference proceedings class from
https://www.mathsoc.jp/activity/meeting/texstyle/
Class files should be upgraded for each meeting. Please use the latest one for posting.
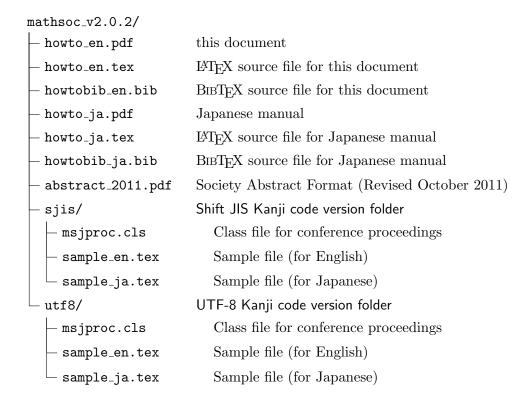When the archive file is expanded, it looks like Figure 1.

```
mathsoc_v2.0.2/
 ├─ howto_en.pdf          this document
 ├─ howto_en.tex          LaTeX source file for this document
 ├─ howtobib_en.bib       BibTeX source file for this document
 ├─ howto_ja.pdf          Japanese manual
 ├─ howto_ja.tex          LaTeX source file for Japanese manual
 ├─ howtobib_ja.bib       BibTeX source file for Japanese manual
 ├─ abstract_2011.pdf     Society Abstract Format (Revised October 2011)
 ├─ sjis/                 Shift JIS Kanji code version folder
 │   ├─ msjproc.cls          Class file for conference proceedings
 │   ├─ sample_en.tex        Sample file (for English)
 │   └─ sample_ja.tex        Sample file (for Japanese)
 └─ utf8/                 UTF-8 Kanji code version folder
     ├─ msjproc.cls          Class file for conference proceedings
     ├─ sample_en.tex        Sample file (for English)
     └─ sample_ja.tex        Sample file (for Japanese)
```

Figure 1: Archive file structure

Please put the class file `msjproc.cls` in the same folder as the LaTeX source. You do not need to install on the system. Do not change the character code of `msjproc.cls` from UTF-8.

*The line feed code of UTF-8 version is LF (0x0A). The line feed code for of Shift JIS is CR + LF (0x0D, 0x0A).

1.3 Packages loaded by msjproc

The following packages/class files are loaded by msjproc. Some of them are not loaded depending on class options.

article, jsarticle, ltjsarticle, l3keys2e, expl3, iftex, geometry, amsmath, amssymb, amsthm, url, titlesec, titletoc

2 Instructions

To use this conference proceeding class file, please do as follows.

```
\documentclass{msjproc}
\begin{document}
 ⋮
\end{document}
```

As a default, this class files runs with Japanese mode. If you want to write a English article, add `english` option as

```
\documentclass[english]{msjproc}
```

The engine used is guessed by the class file. If you want to specify the engine explicitly, please add one of `platex`, `uplatex`, `lualatex`, `xelatex`, `pdflatex` to the class option.

2.1 Class file options

The following can be specified as options for `\documentclass`

```
draft   : draft mode
english : Force to operate in English mode
```

2.2 How to write a bibliography

To describe references `thebibliography` environment and `\bibliography` command are available to use the output of BibTeX/jBibTeX. A bibliographic style files (BST file) is not provided, so please use a standard one.

2.3 Specification change/extension function

Though this class file is made based on article.cls, jsarticle.cls and ltjsarticle.cls, the description method such as title/author information is partially different. The commands that have been changed or extended/added from the LaTeX are as follows.

`\author{name}{affiliation}`

If you write the command as many as the number of authors, it will be output vertically. Use this in the preamble.

`\address{contact}`

The contact information of the author specified by the previous `\author` command is displayed in the footnote. Use this in the preamble.

`\email{email address}`

Displays the author's email address specified in the previous `\author` command in the footnote. Use this in the preamble.

`\webpage{webpage URL}`

Displays the author's web page URL specified in the previous `\author` command in the footnote. An example is `\webpage{https://www.mathsoc.jp/}`. Use this in the preamble.

`\thanks{comment}`

This is an instruction used to describe Kakenhi and other grants, and will be displayed in the footnote. Use this in the preamble.

`\keywords{keyword list}`

Specify one or more keywords separated by commas. Appears in footnotes on page 1. However, nothing is output if it is not used. It is the same operation as AMS class file `amsart.cls`. Use this in the preamble.

`\subjclass[version]{codelist}`

Specify the AMS Mathematics Subject Classification code separated by commas. It is output in the footnote on the first page, but nothing is output if it is not used. Bar You can specify 1991, 2000, 2010 and 2020 as version. The default value is 2020. It works the same as the AMS class file `amsart.cls`. Use this in the preamble.

`abstract environment`

Used to write an overview of the proceedings.

You can write after the \maketitle command like the class files `article.cls`, `jarticle.cls` You can also write before the \maketitle command, such as in the AMS class file `amsart.cls`.

Theorem environment

When `msjproc` is running in Japanese mode, the style of theorem environments defined by \newtheorem is changed to Japanese style.

For specific writing, please refer to `sample_ja.tex` and `sample_en.tex` in the archive.

2.4 Functional restriction

Some functions included in LaTeX2ε standard class files article.cls, jarticle.cls are disabled.

- Almost all options do not work.

- `twocolumn` option cannot be used.

- The page styles except `empty` are deleted.

- If you change the margins etc. in the source file, an error will occur. It will be checked. The variables are as follows.

\textwidth	\headheight	\evensidemargin
\textheight	\headsep	\oddsidemargin
\topmargin	\footskip	

- You cannot use the \enlargethispage command to temporarily increase the page height.

3 Miscellaneous

3.1 Known bug

The following bugs exist in this class file.

- If you use the \footnote command in `abstract` environment, depending on where you write \maketitle, the order in which the footnotes are numbered may be different. As a general rule, in `abstract` environment, do not use the \footnote command.

3.2 About copyright

1. Writings of class files and documents included in this package for academic conference proceedings The copyright belongs to the Mathematical Society of Japan.
2. There are no particular restrictions on duplication and redistribution by users. It is prohibited to redistribute for a fee except for the minimum necessary cost.

3.3 contact information

To report bugs such as class file bugs and conflicts with existing style files, please contact the following for information and requests for improvement.

Mathematical Society of Japan
Information System Operation Committee
e-mail: texstyle@mathsoc.jp (for class file inquiry only)

References

[1] The Mathematical Society of Japan. Class file for conference proceedings. (https://www.mathsoc.jp/activity/meeting/texstyle/).

[2] The Mathematical Society of Japan. Society abstract format, 2011. (https://www.mathsoc.jp/meeting/texstyle/abstract_2011.pdf).