Instructions for preparation of manuscript with jsiamletters.cls

First Author[1*] and Second Author[2,3]

[1] Affiliation A1, Address B1
[2] Affiliation A2, Address B2
[3] Affiliation A3, Address B3

*Corresponding author: *first-author@e-mail-address*

Abstract
Abstract must be 50–100 words. Last updated: 5 Nov. 2020

1. Introduction

This is a template file to prepare your manuscript for JSIAM Letters with the LaTeX word processor. The latest LaTeX class file "jsiamletters.cls" is available at the JSIAM Letters web site,

http://jsiaml.jsiam.org/jsiaml_Instructions_to_Authors.html

2. For submission

Download the latest LaTeX class file "jsiamletters.cls" and the "Author's check list" from our web site. Please submit the manuscript translated into PDF format file to the JSIAM Letters submission site:

http://mc.manuscriptcentral.com/jsiaml

Before the submission, please make sure to spell check on the manuscript and check the items written in "Author's check list". It is not necessary to send "Author's check list". Moreover, please check NO overfull and underfull warnings in the manuscript without adjusting the line spacing, the font-size and so on.

3. Preamble section

Before `\begin{document}` section of the LaTeX source.

3.1 Research activity group

Fill in the name of research activity group of JSIAM which is expected to handle this manuscript

`\group{name of research activity group}`

List of research activity group:

Algorithmic Number Theory and Its Applications, Algorithms for Matrix / Eigenvalue Problems and their Applications, Applied and Computational Mathematics in Industry, Applied Chaos, Applied Integrable Systems, Continuous Optimization, Discrete Systems, Formal Approach to Information Security, Geometric Shape Generation, Machine Learning, Mathematical Aspects on Continuum Mechanics, Mathematical Design, Mathematical Finance, Mathematical Medicine, Mathematical Politics, Mesh Generation and CAE, Origami Engineering, Quality of Computations, Scientific Computation and Numerical Analysis, Setouchi-rim JSIAM Local Research Group, Topological Data Analysis, Wavelet Analysis, Young Researchers

3.2 Author(s) informations

Capitalize the first letter of the first word and any proper nouns in "affiliation", "authorinfo" and "title".

- *affiliation*

`\affiliation{affiliation name}{postal address of the affiliation}`

Give adequate postal addresses including the postal code and the name of the country. The kth affiliation is assigned the affiliation number "k".

- *authorinfo*

Every author needs to complete all entries.

`\authorinfo{author name}{affiliation numb er(s)}{e-mail address}`

As an example, this template case is shown as follows:

\affiliation{Affiliation A1}{Address B1}
\affiliation{Affiliation A2}{Address B2}
\affiliation{Affiliation A3}{Address B3}
\authorinfo{First Author}{1}{first-author@e-mail-address}*
\authorinfo{Second Author}{2,3}{second-author@e-mail-address}
\email{first-author@e-mail-address}

Give an e-mail address of the corresponding author in the "email" field, and add an asterisk "*" to the corresponding author's affiliation number. Other author's e-mail addresses are not appeared on the paper.

Note: For anti-spam purpose JSIAML office replaces the "@" character in e-mail address with an "@"-mark picture at the creation of the pdf file for online.

3.3 Title

The first letter of the title should be capitalized with the rest in lower case.

```
\title{Title of the paper}
```

3.4 Abstract

The abstract must be 50–100 words.

```
\abstract{abstract of 50-100 words}
```

3.5 Keywords

3-5 Keywords. Each keyword should be given in lowercase letters except for proper nouns and acronyms.

```
\keywords{keyword 1, keyword 2, keyword 3}
```

3.6 Optional fields

The author can use the following fields to change the default settings within the pre-assigned range to each field.

- *author*

```
\author{J1$^{K1}$, J2$^{K2}$, ... }
```

Jn ($n = 1, 2, \ldots$): the nth author name
Kn ($n = 1, 2, \ldots$): the affiliation number(s) of the nth author

- *inst*

```
\inst{$^{1}$\,A1, B1\\ $^{2}$\,A2, B2...}
```

where the superscript denotes the affiliation number.

An ($n = 1, 2, \ldots$): the nth affiliation name
Bn ($n = 1, 2, \ldots$): the postal address of the nth affiliation

In case of two affiliations in one line:

```
\inst{\affinum{1}Graduate School of
Informatics, Kyoto University, Kyoto 606-8501,
Japan and $^{2}$\,$CREST, JST, Japan}
```

- *runauthor*

```
\runauthor{author name(s)}
```

3.7 Packages

You can USE seven packages amsmath, amssymb, amsthm, bm, cite, url, and graphicx without inclusion. Therefore, many commands and extra mathematical symbols defined in $\mathcal{AMS}$-LaTeX package with $\mathcal{AMS}$ fonts (e.g., \dfrac command, \mathbb command, *align* environment) are available. For the details of these packages, please read the documents by the following page:

http://www.ctan.org/pkg/

4. Main body of the text

Format All manuscripts must be written in English. The length of the manuscript should not exceed four A4 pages in double column format. Manuscripts should conform to the jsiamletters style for the document preparation system LaTeX. It is not acceptable to change the LaTeX style defined by the jsiamletters style. Footnotes are not allowed.

Section headers Capitalize the first letter of the first word and any proper nouns.

Fig. 1. Colorful hats.

5. Equations

We recommend to use \eqref command in order to refer the equation number. Please USE *align* environment instead of *eqnarray* environment.

6. Figures (File size and fonts)

Please care about file size. Not recommended to publish the paper of the over 2MB file size.

For any texts in figures, please embed all fonts even if you do not think you have used any special fonts. Before beginning this embedding procedure, Author have to check the licence of the fonts for the web-based online publications. In some case, it is permitted only for printed publications not for online publications.

```
\begin{figure}[t]
\centering
\includegraphics[scale=1.0]{pdf/kodim03.pdf}
\caption{hats.}
\end{figure}
```

Only PDF format is acceptable for figures, and DO NOT include PNG, JPEG, EPS files, etc.

7. Acknowledgments

Please use the \acknowledgments command.

8. References

References should be individually numbered *in the order of appearance*. In the text, they should be referred to by these numbers in square brackets.

Examples of citations are: [1, 4] or [1–3].
Examples of references are:

- **Books**

[1] P. Henrici, Applied and Computational Complex Analysis. Vol. 1, John Wiley, New York, 1974.

[2] R. Barrett et al., Templates for the Solution of Linear Systems: Building Blocks for Iterative Methods, 2nd edn., SIAM, Philadelphia, 1994.

- **Journals**

[3] S. F. Ashby, T. A. Manteuffel and P. E. Saylor, A taxonomy for conjugate gradient methods, SIAM J. Numer. Anal., **27** (1990), 1542–1568.

[4] T. A. Davis and Y. Hu, The university of Florida sparse matrix collection, ACM Trans. Math. Software, **38** (2011), 1–25.

- **Proceedings**

[5] T. Fukaya and T. Imamura, Performance evaluation of the Eigen Exa eigensolver on Oakleaf-FX: tridi-agonalization versus pentadiagonalization, in: Proc. of IPDPS 2015 Workshops, pp.960–969, IEEE Computer Society, 2015.

- **arXiv**

[6] A. Imakura, K. Morikuni and A. Takayasu, Verified partial eigenvalue computations using contour integrals for Hermitian generalized eigenproblems, arXiv:1904.06277v3 [math.NA].

- **Software**

[7] D. H. Bailey, QD: A double-double and quad-double package for Fortran and C++, Version 2.3.22, 2019, `https://www.davidhbailey.com/dhbsoftware/`. (accessed 5 Nov. 2020)

[8] The PARI Group, Bordeaux, PARI/GP, Version 2.13.0, 2020, `http://pari.math.u-bordeaux.fr/`. (accessed 5 Nov. 2020)

- **Web materials**

[9] J. D. Cook, Differentiation in Banach spaces, 1994, `https://www.johndcook.com/Differentiation_in_Banach_spaces.pdf`. (accessed 5 Nov. 2020)

Only one city of publication should be provided for the book references. For references with more than two authors and editors, the use of "et al." is accepted on a list of authors. The full URL and the last accessed date should be given for the software and web materials. Any further information (author or group names, versions, dates, etc.) should also be given if known. For databases on web sites, the developers often present how to cite the databases and please follow the instructions. For example, when using SuiteSparse Matrix Collection as a data set, the author should cite the original paper [4].

9. For public database

The contents of the fields

- Author(s) informations
- Title
- Abstract
- Keywords
- References

are registered to the public databases for online publication by J-Stage. Please notice that TeXcommands, which are used in these fields except for "References", will be publish on webs as it is.

References

[1] P. Henrici, Applied and Computational Complex Analysis. Vol. 1, John Wiley, New York, 1974.

[2] R. Barrett et al., Templates for the Solution of Linear Systems: Building Blocks for Iterative Methods, 2nd edn., SIAM, Philadelphia, 1994.

[3] S. F. Ashby, T. A. Manteuffel and P. E. Saylor, A taxonomy for conjugate gradient methods, SIAM J. Numer. Anal., **27** (1990), 1542–1568.

[4] T. A. Davis and Y. Hu, The university of Florida sparse matrix collection, ACM Trans. Math. Software, **38** (2011), 1–25.

Preamble section

```
\documentclass[twocolumn]{jsiamletters}
%%%
%%% template file for JSIAML
%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%% research activity group (Mandatory field)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
\group{Fill in the corresponding group.
%Algorithmic Number Theory and Its Applications
%Algorithms for Matrix / Eigenvalue Problems
% and their Applications
%Applied and Computational Mathematics
% in Industry
%Applied Chaos
%Applied Integrable Systems
%Continuous Optimization
%Discrete Systems
%Formal Approach to Information Security
%Geometric Shape Generation
%Machine Learning
%Mathematical Aspects on Continuum Mechanics
%Mathematical Design
%Mathematical Finance
%Mathematical Medicine
%Mathematical Politics
%Mesh Generation and CAE
%Origami Engineering
%Quality of Computations
%Scientific Computation and Numerical Analysis
%Setouchi-rim JSIAM Local Research Group
%Topological Data Analysis
%Wavelet Analysis
%Young Researchers
}
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% affiliation and author informations
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%% affiliation(s) (Mandatory field)
%
% The k-th affiliation is assigned the
% affiliation number ``k''.
%
% \affiliation{affiliation name}
% {postal address of the affiliation}
%
%%% author(s) informations (Mandatory field)
%
```

```
% Every author needs to complete all entries.
%
% \authorinfo{author name}
% {affiliation number(s)}{e-mail address}
%
% [example]
% The affiliation of the first author is
% A1 and the affiliations of the second
% author are A2 and B3
% (affiliation number = 1)
\affiliation{Affiliation A1}{Address B1}
% (affiliation number = 2)
\affiliation{Affiliation A2}{Address B2}
% (affiliation number = 3)
\affiliation{Affiliation A3}{Address B3}
%
% first author
\authorinfo{First Author}{1*}
           {first-author@e-mail-address}
% second author
\authorinfo{Second Author}{2,3}
           {second-author@e-mail-address}
%
% corresponding author's e-mail address
\email{first-author@e-mail-address}
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% paper informations
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%% title (Mandatory field)
%
\title{Instructions for preparation of
       manuscript with {\sf jsiamletters.cls}}
%
%%% abstract (required to be filled in)
%
\abstract{Abstract must be 50-100 words.}
%
%%% keywords (Mandatory field)
%
% 3-5 Keywords
%
\keywords{keyword 1, keyword 2,
keyword 3 (up to 5 keywords)}
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% customized titlepage entry and running
% head author
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%% Optional field
%
%\author{}
%\inst{}
%\runauthor{}
%
%%%%%%%%%% JSIAM Letters office field %%%%%%%%
%%% Do not edit following 5 lines.
%\receiveddate{2013}{01}{01}
%\accepteddate{2013}{01}{01}
%\volume{05}
%\articlepages{00}{00}
```

```
%\publishedyear{2013}
%\usepackage{fancybox}
%\usepackage{color}
%\fancyput(-0.3in,-9.5in){
% \color[rgb]{0.8,0.8,0.8}{
% \rotatebox{55}{
% \scalebox{9.3}{\rm Uncorrected Proof}
% }
% }
%}
%%%%%    TEXT START    %%%%%
```