

A demonstration of the L^AT_EX 2_ε class file for Mathematical Communications*

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Abstract. This paper describes the use of the L^AT_EX 2_ε mc.cls class file for setting papers for *Mathematical Communications*.

AMS subject classifications: 65D10, 92C45

Keywords: L^AT_EX 2_ε, instructions

1. Introduction

The mc.cls document class is designed to produce papers suitable for publication in the *Mathematical Communications*. It is based on the standard article L^AT_EX 2_ε class. The following standard packages are already loaded: `amssymb`, `amsmath`, `amsthm`, `latexsym`, `amsfonts`, `amsbsyt`, `graphicx`.

This is a template article, which you can use as a skeleton for your own article.

2. Guide for authors

2.1. Submission of manuscript

Manuscripts MUST be submitted using the online submission system. We do NOT accept submissions by mail. It is journal policy that the online submission process MUST be carried out by the corresponding author. The corresponding author will receive all correspondence, including an initial acknowledgment and the decision, by email.

2.1.1. Initial submission (manuscript for review)

The submission file MUST be a single PDF created from L^AT_EX source (avoid false converting software!) prepared according to the journal's L^AT_EX class file mc.cls. No other file format will be accepted. The easiest way to prepare your manuscript is to download the style file mc.cls and fill in this template article. Try to avoid using extra files (macros).

The manuscript, no longer than 20 pages, should contain the following elements:

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- *Full title* (up to 150 characters)
- *Short title* (not more than 50 characters including spaces)
- *Author names and affiliations.* For each author add his/her affiliation which should include the full postal address and the country name. If available, specify the e-mail address of each author. Clearly indicate who is the corresponding author of the paper.
- *Abstract.* A concise abstract is required (not more than 50 words). The abstract should state the problem studied and the principal results proven.
- *Keywords* (at least two, up to six key words).
- *Mathematics Subject Classification.* Include one or more Math. Subj. Class. 2010 codes (see <http://www.ams.org/msc>).
- Main text
- *References.* References in the text are cited by numbers in square brackets, e.g. [1]. A full list of references should be given at the end of the manuscript in alphabetical order by the first author's last name and formatted as it is in this template article.

Ensure the references are quoted accurately, and use the standard abbreviations for journal names prepared by the American Mathematical Society (see Mathematical Reviews Serials Abbreviations List). Unpublished materials should not appear in the reference list.

All figures **MUST** be in EPS black-and-white format. To include your graphics files into the \LaTeX code, use one of the standard figure inclusion commands (e.g. *includegraphics*) and the standard \LaTeX figure packages such as *graphics* and *graphicx*.

2.1.2. Revised manuscript

Revised manuscripts **MUST** be uploaded within 2 weeks (for minor revisions) or 4 weeks (for major revisions) of authors being notified of conditional acceptance pending satisfactory revision. Revisions must still be uploaded as a single PDF generated from the revised \LaTeX source files. If the revised version of a manuscript is not uploaded within the specified time, the manuscript will be withdrawn from the system, unless the editor concerned agrees to extend the deadline.

2.1.3. Final submission (accepted paper for publication)

If a submission is accepted, the contact person will receive instructions for submitting \LaTeX source of final version of accepted paper, as well as all figures in EPS format.

2.1.4. Proof correction

The corresponding author will receive a proof of the paper for checking before it is published. Authors should keep in mind that reading proofs is their responsibility. Corrections should therefore be clear and unambiguous. The main aim of proofreading is to correct errors that may have occurred during the production process, and not to modify the content of the paper. Please correct your galley proofs and return them within 5 working days.

Note: The authors do not receive a print copy of the journal/paper, but the corresponding author receive by email a copy of published paper in PDF format.

2.2. Instructions for authors how to use the *mc.cls*

2.2.1. Header information

The heading for any file using `mc.cls` is like this;

```
\documentclass{mc}

%%%% journal  info -- DO NOT CHANGE %%%%%%%%%%
\setcounter{page}{1}
\renewcommand\thisnumber{x}
\renewcommand\thisyear {201x}
\renewcommand\thismonth{xxx}
\renewcommand\thisvolume{xx}
\renewcommand\datereceived{}
\renewcommand\dateaccepted{??}
%%%%%%%%%   end journal info  %%%%%%%%%%%%%%

%%%%% author macros %%%%%%%%%%%
% place your own macros HERE
%%%%% end %%%%%%%%%%%

\begin{document}

\markboth{Author(s)}{Short Title}

\title[Short running title]{Make the Title in Title Case}

\author[Author(s)]{First Author\affil{1}, Second
Author\affil{2}\comma\corrauth and Third Author\affil{2}}

\address{\affilnum{1}\ Address for first  author\\
\affilnum{2}\ Address for second and third author}

\emails{{\tt Email address of First Author} (First Author), {\tt
Email address of Second Author} (Second Author), {\tt Email address
```

of Third Author} (Third Author)}\}

```
\begin{abstract}
Text here.
\end{abstract}
```

```
\keywords{list here}
```

```
\ams{list here}
```

```
\maketitle
```

```
\section{First Section}
```

```
\end{document}
```

2.2.2. Theorems and other environments

The *mc.cls* document class offers a number of environments to declare theorems and related structures.

Theorems are declared using the environment

```
\begin{theorem}
Suppose that xxxx      xxxx      xxxx
xxxx      xxxx      xxxx      xxxx.
\label{theorem1}
\end{theorem}
```

The result of the above is as follows:

Theorem 1. *Suppose that xxxx xxxx xxx xxxx xxxx xxx xxxx.*

Proofs are handled by the environment

```
\begin{proof}
To prove xxx  xxx  xxx
\end{proof}
```

The symbol \square is automatically placed at the end of each proof.

In much the same way, lemma, proposition, corollary, remark, definition, condition, example, conclusion, conjecture, algorithm, assumption, assertion, property, problem and claim environments are declared. For example,

```
\begin{definition}[see \cite{Boggs1987}]
We say that xxxx      xxxx      xxxx
xxxx      xxxx      xxxx      xxxx.
\label{definition1}
\end{definition}
```

results in

Definition 1 (see [1]). *We say that xxx xxx xxx xxx xxx xxx xxx.*

2.2.3. Floating material

To include a figure, use the figure environment. The commands `\begin{figure}` and `\end{figure}` should surround the figure, including the figure caption. The `\begin{figure}` command should be followed by the command `\centering` (which takes no argument) to center the graphic horizontally on the page. For example,

```
\begin{figure}
\centering
\includegraphics[width=6.5cm]{fig1.eps}
\caption{Figure example}
\label{fig1}
\end{figure}
```

Tables are defined in a standard manner. For example, the code

```
\begin{table}[h]
\centering
\label{table1}
\begin{tabular}{|c|c|c|}\hline
MAE & RMSE & MARE\\\hline
10 & 15 & 10\\\hline
3 & 9 & 8\\\hline
\end{tabular}
\caption{Data listing}
\end{table}
```

results in

MAE	RMSE	MARE
10	15	10
3	9	8

Table 1: Data listing

Acknowledgement

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References

- [1] P.T. BOGGS, R.H. BYRD, R.B. SCHNABEL, *A stable and efficient algorithm for non-linear orthogonal distance regression*, SIAM J. Sci. Statist. Comput. **8**(1987), 1052–1078.

- [2] J.E. DENNIS, JR, R.B. SCHNABEL, *Numerical Methods for Unconstrained Optimization and Nonlinear Equations*, SIAM, Philadelphia, 1996.
- [3] G.A. WATSON, *The total approximation problem*, in: *Approximation Theory IV*, (C.K. Chui, L.L. Schumaker and J.D. Ward, Eds.), Academic Press, New York, 1983, 723–728.