

THIS IS THE FULL TITLE OF YOUR JCAM ARTICLE

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[Received: March 26, 2004]

Abstract. This paper is a template for those authors who wish to prepare their manuscript for the Journal of Computational and Applied Mechanics *in the format of the journal* by using the `amsart` document class with `bibtex`. You can reedit the text of this paper and the corresponding `bib` file in order to obtain your manuscript.

Mathematical Subject Classification: 05C38, 15A15

Keywords: manuscript preparation, document class, AMS \LaTeX , references

1. Introduction

The present paper is written to you with the intention to provide help with preparing your manuscript for the Journal of Computational and Applied Mechanics.

We assume that you are going to use \LaTeX . We remind you of the fact that a \LaTeX file is a simple `ascii` file which can be edited with any editor, for instance with Notepad. However if you have no familiarity with \LaTeX you are advised to use Scientific Word or Workplace which provide you with a user friendly environment very similar to the environment provided by MS Word. If this is your choice there is no need to learn \LaTeX commands. What is more you can work more or less in the same way as you do under MS Word.

If you have familiarity with \LaTeX you shall hardly find anything new for you in this article. In spite of that after reading it you will be able to satisfy all the rules

prescribed for an article submitted to our journal. For this reason we kindly ask you to read it.

If you work under an MS Windows operating system you can use $\text{MiK}\text{T}\text{E}\text{X}$, which is an excellent and free TEX and $\text{L}\text{A}\text{T}\text{E}\text{X}$ system, with the editors WinEdt (shareware) or $\text{T}\text{E}\text{X}\text{nicCenter}$ (free).

We remark that links to the homepages of Scientific Word or Workplace, $\text{MiK}\text{T}\text{E}\text{X}$, WinEdt and $\text{T}\text{E}\text{X}\text{nicCenter}$ can be found in our homepage – click on the button Rules for Authors.

The text is organized into seven sections. If necessary a section is divided into subsections, from which one of the subsections turns its attention to the use of Scientific Word or Workplace while another subsection is devoted to presenting further possibilities with an emphasis laid on the use of $\text{MiK}\text{T}\text{E}\text{X}$ with WinEdt or $\text{T}\text{E}\text{X}\text{nicCenter}$.

Section 2 details some general rules. The question of the paper, text and font sizes is considered in Section 3. Section 4 is devoted to the problem of how to make your title page. Section 5 deals with the problem of equation numbering. The issue how to place a figure into your document is investigated briefly in Section 6. The last section deals with references.

2. General rules

The manuscripts submitted to the journal should be written in standard grammatical English. Though the length of a paper is not prescribed, authors are encouraged to write concisely. However, short communications or discussions on papers published in the journal must not be longer than 2 pages.

Each manuscript should be provided with an English Abstract of about 50–70 words, reporting concisely on the objective and results of the paper. The English Abstract is followed by the Mathematical Subject Classification – in case the author (or authors) give the classification codes – then the keywords (no more than five).

References should be grouped at the end of the paper in numerical order of appearance. Author's name(s) and initials, paper titles, journal name, volume, issue, year and page numbers should be given for all journals referenced.

We encourage our authors to submit their papers in electronic form. The text is to be 130 mm wide and 190 mm long and the main text should be typeset in 10pt CMR ($\text{L}\text{a}\text{T}\text{e}\text{X}$) or Times New Roman (MS Word) fonts.

Observe that the first paragraph in a Section is never indented.

We should remark that the format rules detailed in this section are all kept in order if you reedit one of our sample files, for instance this one, when you typeset your paper.

By the way, when we say editing this file we mean the `tex` file `JCAMArticleBib.tex` from which we generated the pdf file you are reading now.

3. Paper, text and font sizes

These are set partly by the `documentclass` command and in the file `JCAM-AMS.tex` which contains \LaTeX commands for our journal. The preamble is the part of your \LaTeX file between the `\documentclass` and `\begin{document}` commands. The command `\input JCAM-AMS.tex` in the preamble reads in the file `JCAM-AMS.tex` for the article you are typesetting. More details are given below:

- The `documentclass` command, which is the very first command in a \LaTeX file, has the following form for our journal:


```
\documentclass[twoside,10pt,reqno,a4paper]{amsart}
```

 Under Scientific Word or Workplace the options of the `documentclass` command – these are listed in square brackets, the separator is a comma – can be changed by clicking on Typeset, Options and packages, where (in the window that opens) one can modify the class options.
- The text sizes are set to the values prescribed by the commands


```
\setlength{\textwidth}{130 true mm} and
\setlength{\textheight}{190 true mm}
```

 which can be found in the file `JCAM-AMS.tex`
- We would like to remind you of the fact that under Scientific Word or Workplace commands in the preamble can be changed by clicking on Typeset, Preamble, where (in the window that opens) one can modify any command in the Preamble. In what follows we shall assume that you can modify the preamble under Scientific Word or Workplace.

When editing this file please do not change the paper, text and font sizes.

4. The title page of your article

4.1. **Editing your title page under Scientific Word or Workplace.** Editing your title page requires three steps.

Step 1.: Open the file `JCAM-AMS.tex` with Notepad. Go to the line

```
Vol. 5., No. 1., (2004)
```

Here you can change the volume and issue numbers – these numbers are presently 5 and 1 – , and the year, which is 2004. This step is optional and there is no need to make it.

Step 2.: If ready

(a) reedit the line

```
\fancyhead[CO]{\PUMce{Short title for the running head}}
```

in the preamble to include your Short title for the running head.

Do not remove the braces.

(b) Then reedit the line

```
\fancyhead[CE]{\PUMce{J. Smith, L. Merten and I. Kov\`acs}}
```

in the preamble to include your authors for the other running head. Do

not remove the braces.

Step 3.: After opening this file under Scientific Word or Workplace you will have grey boxes in the screen.

- (a) Click on the button PUMHeadFirst. In the window that opens you will have the text

```
\PUMHeadFirst{1}{10}
```

The numbers 1 and 10 are the page numbers for your first and last pages. Do not change the first number. You can rewrite the second to an appropriate value when you are ready with your manuscript.

- (b) Click on the button setcounter. In the window that opens you will have the text

```
\setcounter{page}{1}
```

This command sets the page counter to 1. See the number in the braces. Do not change it.

- (c) Click on the button PUMtitle. In the window that opens you will have the text

```
\PUMtitle{THIS IS THE FULL TITLE OF YOUR JCAM ARTICLE}
```

Replace the text in the braces with the title of your paper.

- (d) Click on the button PUMauthor. In the window that opens you will have the text

```
\PUMauthor{John Smith}
```

Replace the text in the braces with the full name of the first author.

- (e) The text that follows till the green down and to the left arrow is the first address line for the first author. Replace the text

```
Texas A \& M University
```

with the first address line for your first author. However do not delete the green down and left arrow.

- (f) The text that follows, i.e., the sentence

```
College Station, Texas 7843, USA
```

is the second address line for your first author. Replace it with the corresponding data of your first author.

- (g) The text that follows is the e-mail address

```
aone@aoneinst.edu
```

for the first author. Replace it with the corresponding data of your first author.

- (h) The text in the screen which begins with the grey button PUMauthor and ends with the Comment button **E-mail address for ...** is a command consisting of the parts listed above. What is more you can reedit it in the way explained above. In other words if you have one author you can remove the two PUMauthor commands left. Keep in mind that these commands should precede the button PUMrecived.

- (i) Click on the button PUMrecived. In the window that opens you will have the text

```
\PUMreceived{March 26, 2004}
```

Reedit the date in the braces as you wish.

- (j) Click on the button PUMAbstract. In the window that opens you will see the abstract of the present article. Replace the text in the braces with your own abstract.
- (k) Click on the button PUMreceived. In the window that opens you will have the text

```
\PUMclass{05C38, etc.}{manuscript preparation,..., etc.}
```

Please replace the text in the first pair of braces with your mathematical subject classification codes. If ready replace the text in the second pair of braces with your keywords. Keep in mind that the maximum number of your keywords is about five.

4.2. **Editing your title page under WinEdt or T_EXnicCenter.** Editing your title page requires again three steps.

Step 1.: Open the file JCAM-AMS.tex with WinEdt or T_EXnicCenter. Go to the line

```
Vol. 5., No. 1., (2004)
```

Here you can change the volume and issue numbers – these numbers are presently 5 and 1 – , and the year, which is 2004. This step is optional and there is no need to make it.

Step 2.: If ready open the file JCAMArticleBib.tex with WinEdt or T_EXnicCenter. (In the sequel we shall assume that this file is open.)

(a,b) Then reedit the lines

```
\fancyhead[CO]{\PUMce{Short title for the running head}}
\fancyhead[CE]{\PUMce{J. Smith, L. Merten and I. Kov'acs}}
```

in the preamble to include the short title and the names of the authors for the running heads. Do not remove the braces.

Step 3.: Reedit the text

```
% Setting the page numbers for the first and last pages for the
% running head in your very first page. Please start with
% 1 for the first page. The second number is that of the pages
\PUMHeadFirst{1}{10}%
% Setting the page counter
\setcounter{page}{1}%
\thispagestyle{plain}%
%The title of your paper
\noindent\PUMtitle{THIS IS THE FULL TITLE OF YOUR JCAM ARTICLE}
%Data for the first author
\noindent\PUMauthor{John Smith}%Authors name for the first author
{Texas A & M University}\[Opt]%Address line 1
College Station, Texas 7843, USA}%Address line 2
{aone@aoneinst.edu}% E-mail address for the first author
%Data for the second author
\noindent\PUMauthor{Lutz Merten}%Authors name for the second author
{Institute f\"ur Mechanik, Otto von Guericke Universit\"at}\[Opt]%Address line 1
```

```

Postfach 4120, D-39016 Magdeburg, Germany}% Address line 2
{atwo@atwoinst.edu}% E-mail address for the second author
%Data for the third author
\noindent\PUauthor{Istv\'an Kov\'acs}%Authors name (the third author)
{University of Miskolc\[[Opt]           %Address line 1
H-3515 Miskolc--egyetemv\'aros, Hungary}% Address line 2
{athree@atwoinst.hu}% E-mail address for the third author
\noindent\PUreceived{March 26, 2004}
\noindent\PUAbstract{This paper is a template for those authors
who wish to prepare their manuscript for the Journal of Computational
and Applied Mechanics by using the amsart document class with bibtex.
You can reedit the text of this paper and the corresponding bib file
in order to obtain your manuscript.}
\noindent
\PUclass{05C38, 15A15}{manuscript preparation,
document class, AMS\LaTeX, references}%
which follows the \begin{document} command.

```

5. Equation numbering

Equation numbers appear on the right side of your equations since the command `\documentclass` has `reqno` as a parameter. The equation numbers may have two forms.

- A single series of consecutive numbers. This is achieved if you remove the command

```
\numberwithin{equation}{section}
```

from the preamble.
- Equations are numbered within sections if the command

```
\numberwithin{equation}{section}
```

is present in the preamble.

In this article we use numbering within sections:

$$a^2 + b^2 = c^2 \tag{5.1}$$

6. How to place a figure into your article

6.1. The figure formats we prefer. In case you want to place a figure into your \LaTeX document your preamble should contain the commands

```

\usepackage{graphicx}
\DeclareGraphicsRule{.wmf}{bmp}{}{}
%The second line is for the sake of MiKTeX

```

If you choose to reedit this file your preamble contains these commands.

Please prefer the following two formats: wmf (Windows Metafile) or eps (Encapsulated Postscript).

As regards the placement of your figures we distinguish two groups. The first one is formed by the floating figures since these can float within the text. Displayed and inline figures fall into the second group.

We advise to make all your figures belong either to the first group or to the second one. If possible prefer group one to group two.

Please keep your \LaTeX file and your figure files in the same directory. The first ex-

Figure 1. A figure in wmf format

ample, i.e., Figure 1 is a wmf figure. If you label the figure – in this example the name is `FirstFigure` you can refer to it by name making use of the `\ref{FirstFigure}` command. In this example the name of the figure file is `FigureOne.wmf`.

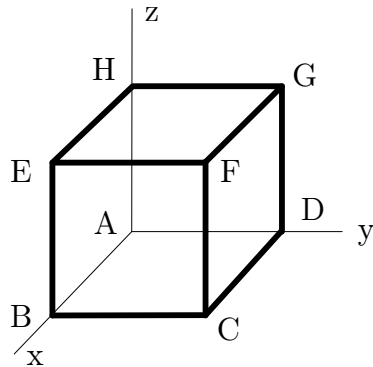


Figure 2. A figure in eps format

The second example, i.e., Figure 2 shows again the previous figure however now in eps format. The label we used to make a reference is `SecondFigure`. In this example `FigureOne.eps` is the file that contains the figure.

6.2. How to place a figure into your article under SWP. Please put the cursor to the place in the text where the figure is to appear. Then click on File, Import picture and after selecting the file type (wmf or eps) and the file itself click on the word Open. You will have the figure in your article. If now you click on the right side of the figure you open the Graphic properties window in which you can label your figure and can add a caption to it.

If your figure is in an MS Word document click on the figure and copy it to the Clipboard. As soon as the figure is in the clipboard you can place it into your \LaTeX document (this file if you choose to reedit it) by putting the cursor to the place in the text where the figure is to appear and then clicking on Edit, Paste special, Picture.

6.3. How to place a figure into your article under Miktex. We assume that you edit your \LaTeX file by WinEdt or \TeX nicCenter. Please go to the possible place of your figure then copy and reedit the following commands (which were used to place the above two figures in the present document)

1. \LaTeX commands for the first figure:

```
\begin{figure}
[tbh]
\begin{center}
\includegraphics[natheight=2.034900in, natwidth=2.031400in,
height=5.239cm, width=5.2302cm]%
{FigureOne.wmf}%
\caption{A figure in wmf format}%
\label{FirstFigure}%
\end{center}
\end{figure}
```

2. \LaTeX commands for the second figure:

```
\begin{figure}
[h]
\begin{center}
\includegraphics[height=2.0652in, width=2.0652in]%
{FigureOne.eps}%
\caption{A figure in eps format}%
\label{SecondFigure}%
\end{center}
\end{figure}
```

7. Sample references by bibtex

7.1. Your bib and bst files. This section explains how to make references by making use of the bib file `JCAMSample.bib` and the bst file `JCAM`. The references made below include the most important types.

7.2. What to do under SWP. Please copy your bib file (if you reedit this file and our bib file `JCAMSample.bib` then the latter) into an appropriate place in your SW or SWP directory tree, i.e., into the directory `swp50\TCITeX\BibTeX\bib` and the `JCAM.bst` file into the directory `swp50\TCITeX\BibTeX\bst`. Here we have assumed that SWP50 is the main directory in your SWP directory tree.

If you reedit this file the next step can be omitted.

If you edit your own file go to the end of the file. Then click on Insert, Typeset Object, Bibliography and select your bib file and the `JCAM.bst` file.

To make a reference move your cursor to the appropriate place, then click on Insert, Typeset Object, Citation and select your bib file in the window that opens. Making use of the View keys button you can make an appropriate choice.

7.3. What to do if you use Miktex. We shall assume that you use either WinEdt or `TEXnicCenter` in which the file you are working on is open. The file `JCAM.bst`, your bib file (if you reedit this file and our bib file `JCAMSample.bib` then the latter) and the article you are working on must be in the same directory.

If you reedit this file the next step can be omitted.

If you edit your own file go to the end of the file. Then insert the commands

```
\bibliographystyle{JCAM}
\bibliography{TheNameOfYourBibFile}
```

in such a way that they precede the `\end{document}` command.

Move your cursor to the place of your citation. Then typeset the command `\cite{key}` in which the key should be taken from your bib file.

Below we give some examples:

1. Here we have made a reference to a book (book): [1]
2. Here we have made references to two articles (article): [2, 3]
3. This is a reference made to a part of the book (incollection): [4]
4. This is a reference made to a part of the book (inbook): [5].
5. Here there is a reference to an article published in conference proceedings (inproceedings): [6]
6. References to conference lectures (conference): [7], [8]
7. Reference to a Manual (manual): [9]
8. This is a reference made to a Ph. D. dissertation: [10]

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