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18th Australasian Fluid Mechanics Conference: Instructions to Authors Sample Paper

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Abstract

Include a brief abstract here.

Introduction

The conference proceedings will be published from "camera-ready copy". For reasons of uniformity, all papers must adhere to the format as defined by the appropriate document template, the `afmc_art` class file together with this "template" paper.

The organising committee will accept papers formatted using either the LaTeX or Microsoft Word templates available on the web at

`http://www.18afmc.com.au`

Particular attention should be given to the formatting style used in this "template". Papers which do not conform to this style will **NOT** be published.

For authors who use LaTeX to prepare a paper, this file serves as an "instructions to authors" and, together with the LaTeX class file `afmc_art.cls`, it is the document template for 18AFMC papers. LaTeX users may begin by editing this file. Note that anything after a `%` is a comment and is ignored by LaTeX. Lines beginning with `%%%` require you to take some action such as fill in the title.

Submitting papers

Please upload a PDF file of your paper for review to the 18AFMC web site http://www.18afmc.com.au by the due date, 17$^{\text{th}}$ August 2012.

Page limits

The page limit for contributed papers is four (4) pages. The page limit for invited papers is eight (8) pages. Papers which exceed this limit will be returned to the author(s) for shortening.

Title and Authors

The title should be in lower case with the first letter of major words capitalised. Avoid forcing a line-break unless absolutely necessary. Author affiliations should consist of "Department, Institution, City, State, Post-code, Country". Author affiliations should be indicated with a superscript digit.

Section Headings

And Subsection Headings

Section and subsection headings should be in lower case with the first letter of major words in upper case. Do not use subsubsections.

Figures and Tables

All figures should either be produced using the LaTeX picture environment or be saved as a postscript file and inserted in the text using the `epsf` macros. Figures and Tables should appear in the text near to where they are first referenced. They should be centred between the margins, and must not fall outside of the normal printed area of the page which is 170mm wide by 248mm high. The font size for all numbers and letters in the figure, as it appears in your paper, must be at least as large as that for the running headings. Put table captions below the table, and figure captions below the figure. Refer to figures and tables as in "figure 1, table 1".

The proceedings will be distributed on a USB memory stick so colour figures and illustrations can be included. However, please try, where possible, to ensure that the details are still clear in black and white copies.

There are two possible LaTeX environments for placing figures and tables within the text. If you wish to have a table or figure that spans both columns of the paper then you must use the environments

```
\begin{table*}
\end{table*}
```

and

```
\begin{figure*}
\end{figure*}
```

in order for the two column format to correctly position tables and figures across the page.

If you wish to place a smaller table or figure (ie one which is less than the column width of 80mm) then you should use the usual LaTeX environments

```
\begin{table}
\end{table}
```

and

```
\begin{figure}
\end{figure}
```

If you use a mixture of standard and $*$-forms you will need to take some care to ensure that the double-column tables (or figures) do not appear out of sequence. If this occurs try placing the double column table (or figure) at a later place in the text.

Some care should be taken when reducing the size of figures; make sure that the figure and all labels are still legible.

Problem A		
40×40	80×80	160×160
129	258	520
0.179	1.844	8.527
2.8E-6	4.56E-6	4.5E-6

Table 1: This is an example of a table. Note that it is centred.

Equations

Equations will be centred with a number flush against the right margin as in

$$\rho c_p \frac{\partial T}{\partial t} = S - k \frac{\partial^2 T}{\partial x^2}, \tag{1}$$

and this equation would be referred to as "equation (1)".

Some care should be taken in ensuring that long Mathematical expressions are correctly split over lines. The LaTeX environment

```
\begin{eqnarray}
\end{eqnarray}
```

as in the equation

$$\begin{aligned} \rho c_p \frac{\partial T}{\partial t} &= S - k \frac{\partial^2 T}{\partial x^2} \\ &\quad - k \frac{\partial^2 T}{\partial y^2} - k \frac{\partial^2 T}{\partial z^2} \end{aligned} \tag{2}$$

should be used. If necessary use $\times$ at the end of a line to indicate that the multiplication is to be carried over to the next line.

Miscellaneous

- Try to avoid isolated lines of text where, for example, a paragraph spills over a page. Often a slight rewording resolves the problem.
- Avoid wasted white space around figures or a last page that is almost empty.
- Use quotation marks correctly, as in "correct", not "incorrect".

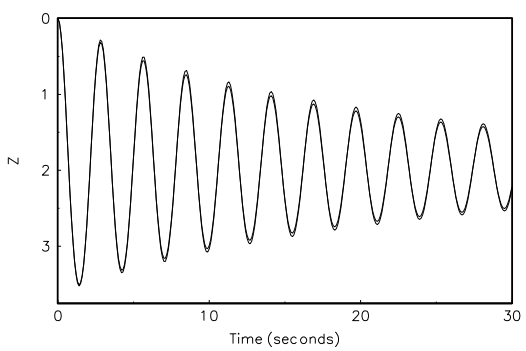

Figure 1: This figure was saved as an encapsulated Postscript file. It is also centred between the margins. Because the bounding box of this figure is fairly tight some space has been added above the figure. This is not a good example of a figure; the lines should be thicker and a bigger and bolder font used.

- Use a hyphen (-) for compound words (two-dimensional), an en-dash to link numbers, nouns or names (Navier–Stokes, pages 27–85), and an em-dash to link clauses or sentences—like this.
- Use a $\times$ to represent multiplication in text, not x.
- Resist the temptation to use footnotes.

Format for References

The references are listed in alphabetical order (by first author) and formatted as shown by the examples at the end of this paper. They may be referred to by the reference number alone or by the author(s) together with the reference number as in "[2] is a book, [3] is an article in a proceedings, [4] is an edited book, and reference Cooley and Tukey [1] is an article in a journal." Multiple citations should be written as [2, 4].

Use the standard bibliography environment for references.

```
\begin{thebibliography}{1}
\end{thebibliography}{1}
```

The style file `afmc.bst` (generously contributed by Andrew Kiss of RSES, ANU) is available for BibTeX users, who will need to put `afmc.bst` in the BibTeX search path (e.g. `/usr/share/texmf/bibtex/bst/` on my machine) and then put `\bibliographystyle{afmc}` in the document preamble. The references section is generated automatically by the command, `\bibliography{`your_bib_file_name_without_the_bib`}`

Conclusions

You should include a brief conclusion section which summarizes the results of your paper.

Acknowledgements

Any acknowledgements should appear immediately before the references. This template is modified from one for the 14th AFMC in Adelaide 2001.

References

[1] Cooley, J.W. and Tukey, J.W., An Algorithm for the Machine Computation of Complex Fourier Series, *Math. Comp.*, **19**, 1965, 297–301.

[2] Goosens, M., Mittlebach, F. and Samarin, A., *The LaTeX Companion*, Addison–Wesley, 1994.

[3] McCormick, S., Multilevel Projection Methodology, in *Computational Techniques and Applications: CTAC93*, editors D. Stewart, H. Gardner and D. Singleton, World Scientific, 1994, 54–57.

[4] Rosenhead, L. editor *Laminar Boundary Layers* Oxford, Clarendon Press, 1963.

Problem A			Problem B		
40×40	80×80	160×160	40×20	80×40	160×80
129	258	520	102	193	387
0.179	1.844	8.527	0.148	0.700	4.468
2.8E-6	4.56E-6	4.5E-6	3.1E-6	3.2E-6	4.2E-6

Table 2: This is an example of a table. Note that it is centred.

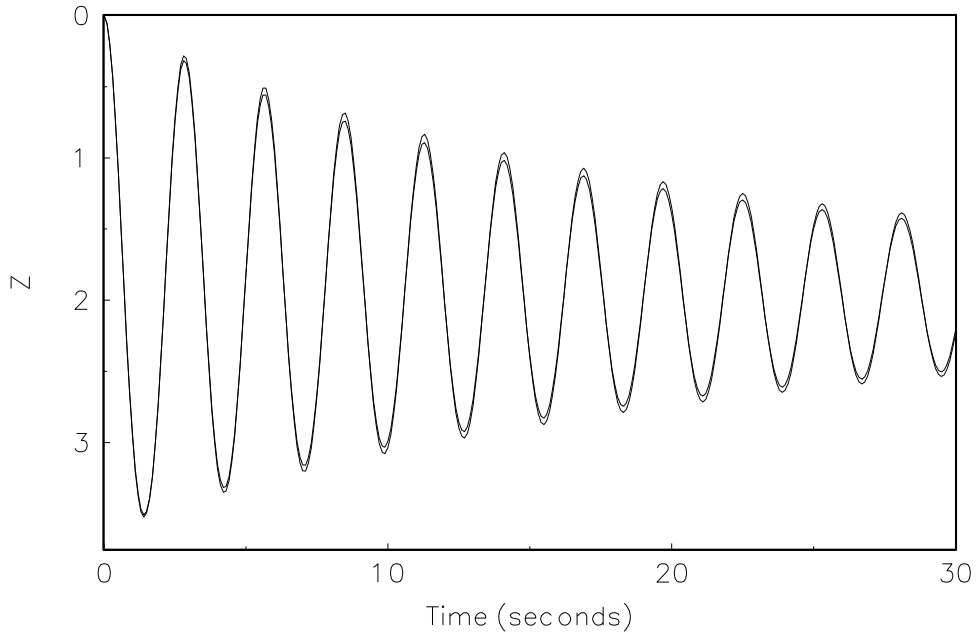

Figure 2: This figure was saved as an encapsulated Postscript file. It is also centred between the margins. Note that because the bounding box was rather generous some space was removed above and below the figure. This is not a good example of a figure; the lines should be thicker and a bigger and bolder font used.