

SAMPLE CONTRIBUTION TO THE PROCEEDINGS OF PANM 17

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Abstract

This sample file serves as an illustration how to prepare a contribution to PANM 17 proceedings in \LaTeX . The authors are kindly asked to follow this style when preparing their manuscripts.

1. Introduction

This document has been prepared using the provided `panm17.cls` class file. The simplest and recommended way to prepare a contribution is to edit this `sample.tex` file.

To include figures, we recommend the command `\includegraphics` (from packages `graphics`, `graphicx`, or `epsfig`). See Figure 1 for an example.



Figure 1: This figure was created in Linux by `xfig`.

When preparing graphics, please keep in mind that the proceedings will be printed in grayscale and scaled down to the size of A5 paper. Although colours may be used in the online version, your graphics should keep legibility when printed. For good results, the text appearing at graphics (description of axes in plots, etc.) should be comparable in size to the main text. Table 1 shows recommended formatting of tables.

#proc	64	128	256	512	1024
case 1					
set-up (sec)	61.0	37.7	25.7	23.2	39.5
iter (sec)	22.3	19.9	27.8	44.9	97.5
case 2					
set-up (sec)	49.5	29.0	18.4	12.6	11.0
iter (sec)	28.5	22.6	16.7	14.7	13.2

Table 1: Strong scaling for different cases.

Equations are included using the standard `equation` environment, e.g.

$$a + b = c. \tag{1}$$

For series of equations, we recommend using the `eqnarray` environment

$$a \times b = c, \tag{2}$$

$$d - e = f, \tag{3}$$

or even better the `align` environment

$$a \times b = c, \tag{4}$$

$$d - e = f$$

that generates more compact expressions; see the amount of spacing around the equality sign.

Command `(\ref{ })` produces references to these equations in the text, such as (1), (2)–(3).

Mathematical lemmas and theorems have special environment, `lemma` and `theorem`, respectively. Examples are Lemma 1 and Theorem 2.

Lemma 1. *The following statement is valid:*

$$1 + 1 = 2. \tag{5}$$

Theorem 2 (Lax–Milgram). *Let a bilinear form $a(\cdot, \cdot)$ satisfy $a(u, u) \geq \gamma \|u\|_V^2$ for all $u \in V$ (ellipticity) and $a(u, v) \leq \Gamma \|u\|_V \|v\|_V$ for all $u, v \in V$ (continuity). Let a linear functional $\ell(v) \leq \Lambda \|v\|_V$ for all $v \in V$ (continuity). Then there exists a unique $u \in V$ for which*

$$a(u, v) = \ell(v) \text{ for all } v \in V. \tag{6}$$

The bibliographic sources are cited by the command `\cite`. Notice the recommended style of the bibliography – an article in proceedings [1], a book [2], a journal

article [3], a Ph.D. thesis [4], and a technical report [5]. Bibliography is sorted alphabetically by surname of the first author and then by year of publication. Users of `BIBTEX` can achieve this behaviour by using provided bibliography style `panm.bst`.

With `BIBTEX`, the DVI output is produced as

1. latex sample
2. bibtex sample
3. latex sample
4. latex sample

In this case, insert the final `*.bbl` file into the `*.tex` file before submission.

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References

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- [2] Babuška, I. and Strouboulis, T.: *The finite element method and its reliability*. Oxford University Press, New York, 2001.
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- [4] Brezina, M.: *Robust iterative methods on unstructured meshes*. Ph.D. thesis, University of Colorado at Denver, 1997.
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