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SAMPLE CONTRIBUTION TO THE PROCEEDINGS OF PANM 22

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Abstract: This sample file serves as an illustration how to prepare a contribution to PANM 22 proceedings in IAT_EX . The authors are kindly asked to follow this style when preparing their manuscripts.

Keywords: finite element method, domain decomposition, parallel algorithms **MSC:** 65N15, 65M15, 65F08

1. Introduction

This document has been prepared using the provided panm.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 Fig. 1 for an example.

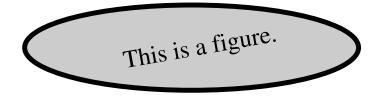


Figure 1: This figure was created in Linux by xfig.

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

| # 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 |

be comparable in size to the main text. Table 1 shows recommended formatting of tables.

Table 1: Strong scaling for different cases.

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

$$a+b=c. (1)$$

For series of equations, we recommend using the equarray environment

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

$$d - e = f, (3)$$

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:

$$1 + 1 = 2.$$
 (5)

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

$$a(u,v) = \ell(v) \quad \text{for all} \quad v \in V.$$
(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 BIBT_EX can achieve this behaviour by using provided bibliography style panm.bst.

With BIBT_FX, the PDF output is produced as

- 1. pdflatex sample
- 2. bibtex sample
- 3. pdflatex sample
- 4. pdflatex sample

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

Acknowledgements

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