

**TITLE OF THE PAPER: CENTERED, UPPERCASE, 14 POINT TIMES
NEW ROMAN, ON SECOND LINE FROM THE TOP MARGIN,
PREFERABLY NOT MORE THAN 3 LINES LONG**

Author A and Author B*

Name of Institute

Corresponding Address

A@institute.gov; B@institute.gov

Double space and list Author C

Department of Nuclear Engineering

Name of University

Address

C@name.univ.edu

ABSTRACT

Use 8.5x11 paper size, with 1" margins on all sides. A required 200-250 word abstract starts on this line. Leave two blank lines before "ABSTRACT" and one after. Use 10 point Times New Roman here and single spacing. The abstract is a very brief summary highlighting main accomplishments, what is new, and how it relates to the state-of-the-art.

KEYWORDS

List of at most five key words

1. INTRODUCTION

Paper starts here with two blank lines before first section title. Use 8.5 x 11 paper size, with 1" margins on all sides. Double-space before and after each subsequent section's title. Most of the formatting is globally set by the specifications given in the *mc2013.cls* file. First-level section titles must be all uppercase and centered, and must be numbered in Arabic numerals as shown above. Unlike the Word and WordPerfect templates, the body text and section titles for this L^AT_EX template use 11-point font. A. Sood found that the 11-point font in L^AT_EX more closely matched the 12-point font in Word and WordPerfect. Introduce the topic of your work in this section.

The first line of a paragraph is not indented; rather double-space between paragraphs. This is done automatically. If you are a L^AT_EX expert you can likely define the established format characteristics in a more elegant manner than what is done here. This is perfectly fine, so long as the established paper format/appearance is maintained. This template is merely to assist with maintaining uniformity in paper appearance.

There are four types of reference styles: journal paper [1], proceedings paper [2], book [3], and website [4]. References to websites are discouraged, but acceptable if absolutely necessary. The paper will be included

*Footnote, if necessary, in Times New Roman font and font size 9

as a *.pdf* file for the proceedings. Note that it is the author's responsibility to review the final PDF version of the paper to ensure proper translation into PDF. Final PDF file size should be no more than 10 MB. Recommended paper length is 10-12 pages. The maximum number of pages is 16. Papers exceeding 16 pages will be rejected.

2. SECOND OR SUBSEQUENT MAJOR HEADING

This is section 2. It is followed by a subsection, that is, 2.1. For this class file you must use the `\section{}` to denote sections (note the capital "S"). The style for subsection titles and all text in this template is defined in the *mc2013.cls* file. Make sure to avoid widow/orphan lines.

2.1. Subsection Title: First Character of Each Non-trivial Word is Uppercase

Double-space before and after secondary titles is automatic. Figures and tables should appear as close as possible to where they are first cited, e.g., Fig. 1, in the text. Figures are numbered in Arabic numerals, with the caption centered below the figure, in **boldface**.

Triple-space before the figure, and after the figure caption.

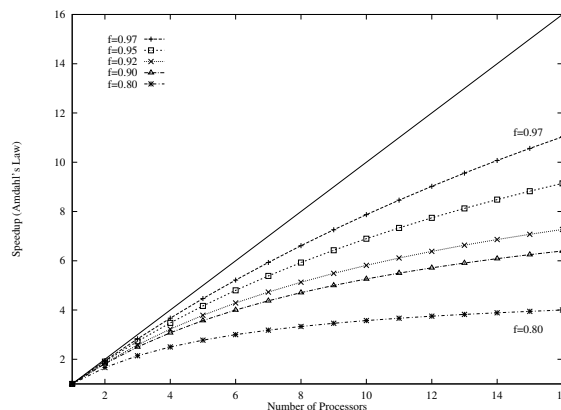


Figure 1. Speedup vs Number of Processors for Varying Parallelizable Fractions in Order to See a Multiple Line Caption

When importing figures or any graphical image please verify two things:

- Any number, text or symbol is in Times font and is not smaller than 10-point after reduction to the actual window in your paper
- That is can be translated into PDF

Equations, such as Eq. (1), should be centered and sequentially numbered to the flush right of the formula.

$$Speedup = \frac{1}{\frac{f}{p} + (1 - f)} \quad (1)$$

The continuation of a paragraph after an equation should not be indented. All paragraphs, as well as section or subsection headings, are separated by just one single empty line.

2.1.1. Sub-section level and lower: only first character uppercase

See Table I for a sample table. The `tabls` package is recommended for improved row and column spacing. Notice the caption appears above the table by setting the `\caption` command immediately after the `\begin{table}`. Tables are numbered in Roman numerals, with the caption centered above the table, in **boldface**. Triple-space before and after the table.

Table I. Parallel Performance for the Sample Problem

Number of Processors	Wall-Clock Time ^a (min)	Speedup (T_s/T_p)	Efficiency (%)
1	100.0	—	—
2	52.6	1.9	95.0

3. CONCLUSIONS

Present your summary and conclusions here.

ACKNOWLEDGMENTS

Acknowledge the help of colleagues and sources of funding, as appropriate.

The format for this template was adapted from the template for PHYSOR 2002 posted on the Internet. Most of the \LaTeX format definitions contained in this and the accompanying files were adapted from sample files supplied by R. Martineau (INL), who plagiarized (adapted) the files from A. Sood (LANL), J. Wagner (ORNL), and James Warsa (LANL).

REFERENCES

1. B. Author, “Title of paper,” *Nucl. Sci. Eng.*, **3**, pp. 13 – 15 (2045)
2. J. E. Hoogenboom and W. R. Martin, “A Proposal for a Benchmark to Monitor the Performance of Detailed Monte Carlo Calculation of Power Densities in a Full Size Reactor Core,” *Proc. Int. Conf. Mathematics, Computational Methods, and Reactor Physics*, Saratoga Springs, New York, (May, 2009)
3. G. I. Bell and S. Glasstone, *Nuclear Reactor Theory*, Van Nostrand, Princeton, NJ (1970)
4. X-5 Monte Carlo Team, “MCNP - A General Monte Carlo N-Particle Transport Code, Version 5,” LA-UR-03-1987, Los Alamos National Laboratory (2005)