Title of the Paper: Centered, Capitalize the First Letter of Major Words, 14-Point Times New Roman, on Second Line From the Top Margin, Preferably Not More Than 3 Lines Long

**Author A, Author B, and Author C[[1]](#footnote-1)\***

Name of Institute

Corresponding Address

A@institute.gov; B@institute.gov; C@institute.gov

**Double space and list Author D (if needed)**

Department of Nuclear Engineering

Name of University

Address

d@name.univ.edu

**Double space and list Author E (if needed)**

Name of the Organization

Address

e@name.organization.com

*[leave space for DOI, which will be inserted by ANS]*

# ABSTRACT

Use 8.5 x 11 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 11point Times New Roman here and single (11 point) 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

# 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. Use one blank line before and after each subsequent section’s title. Section titles have style “Heading 1”, are **11 point font**, must be all uppercase and text aligned left, and must be numbered in Arabic numerals as shown above. Introduce the topic of your work in this section.

Do not indent the first line of a paragraph; rather add one blank line between paragraphs. Use Times New Roman font (and Symbol if needed) and **font size 11** for the main body of the paper. There are four types of reference styles: journal paper [1], proceeding paper [2], book [3], and website [4]. References to websites are discouraged, but acceptable if absolutely necessary. It is the author’s responsibility to check links to references in the PDF file of your paper. All references should be cited in the text in numerical order, in order of appearance as [5-7].

**Do not automatically paginate your pages**. We will consecutively number the proceedings. Also, **no header about the conference should be added**. We will add the conference name, location, and dates as footer for all the papers in the proceedings.

Because the paper will be included as a .pdf file for the proceedings, the author will get the best results from Word or WordPerfect by using the Acrobat Distiller or Acrobat PDFWriter as the default printer. When creating the PDF version, check the “Embed All Fonts” option. **Do not include bookmarks or hyperlinks to references, figures, and tables in the final PDF document.**  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 4 MB.  **The page limit for ATH 2022 papers is 14 pages. Authors will be charged $25.00 per page.**

SECOND OR SUBSEQUENT MAJOR HEADING (FONT SIZE 11 POINT)

A logical division of your paper into sections, etc., makes it so much easier to understand. The style for subsection titles and all text in this template is “Heading 2,” “Heading 3,” etc. All text in this template is “Body Text 3.” Make sure to ***avoid widow/orphan*** lines.

## 2.1. Subsection Title: First Character of Each Non-Trivial Word is Uppercase (11 Point)

Add a blank line before and after secondary titles. Secondary titles should start flush left, and are numbered as illustrated above.

Equations should be centered and sequentially numbered to the flush right of the formula. Use Times New Roman or Euclid font with a font size 11 for the text variables and corresponding sizes proportionally for the subscripts and superscripts.

 (1)

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

### 2.1.1. Sub-subsection level and lower: only first character uppercase (11 point)

Figures and tables should appear as closely 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**. Use two blank lines before the figure and after the figure caption.

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

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



**Figure 1. Sample Figure.**

Tables, such as Table I, are numbered in Roman numerals, with the table title in **boldface** centered above the table with a blank line between the title and actual table. Use two blank lines before and after the table.

**Table I. Sample table: accuracy of nodal and characteristic methods**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mesh** | **8 x 8** | **16 x 16** | **32 x 32** | **64 x 64** |
| **Nodal** | 1.000x10-1 | 2.500x10-2 | 6.250x10-3 | 1.563x10-3 |
| **Characteristic** | 1.000x10-1 | 2.500x10-2 | 6.250x10-3 | 1.563x10-3 |

Use SI Units. Conventional (non-SI) quantities may follow parenthetically if the author desires.

# CONCLUSIONS

Present your summary and conclusions here.

# NOMENCLATURE (IF NEEDED)

If variables are extensively used in the text, a Nomenclature section would be helpful to the readers.

# ACKNOWLEDGMENTS

This template was adapted from the template for M&C + SNA 2007 posted on the Internet. Acknowledge the help of colleagues, and sources of funding, if you wish.

# REFERENCES

*List references here, according to their first use in the paper. Do not include these sentences in the full paper.*

1. B.C. Author(s), “Title of the Journal Paper,” *Journal Name in Italic*, **Volume in Bold** (followed by the issue number in parentheses if known, see Ref. 5 below), pp. 34-89 (2007).
2. D.E. Author(s), “Article Title,” *Proceedings of Meeting in Italic*, Location, Dates of Meeting, Vol. 31, pp. 134-156 (2012).
3. F.G. Author, *Book Title in Italic*, Page or Chapter Numbers, Publisher, City and Country (1995).
4. “NEAMS Update,” http://www.ne.anl.gov/pdfs/NEAMS/NEAMSQuarterlyReport10-2014.pdf (2014).
5. M. Ishii and S. Kim, “Development of One-group and Two-group Interfacial Area Transport Equation,” *Nucl. Sci. Eng.* **146**(3), pp. 257-273 (2004).
6. R.P. Martin and C. Frepoli, “Physical Systems for Regulatory Investigation: Part II Evaluation Methodology,” *Proceedings of 2014 International Topical Meeting on Advances in Thermal Hydraulics (ATH’14)*, Reno, Nevada, June 15–19, 2014 pp. 15-24 (2014).
7. S. Glasstone and W.H. Jordan, *Nuclear Power and Its Environmental Effects*, pp. 50, American Nuclear Society, La Grange Park, Illinois, USA (1980).

# APPENDIX A

If necessary, include Appendices numbered in upper case alphabetical order.

In order to ensure a uniform, professional look to the proceedings, please ***do not modify*** the format of this template without checking with the organizers first.

1. \* Footnote, if necessary, in Times New Roman font and font size 10 [↑](#footnote-ref-1)