

Authors' Instructions for the Preparation of Contributions to Proceedings of the 16th International Symposium on Practical Design of Ships and Other Floating Structures PRADS 2025

Matthew Collette^{1,*} and Austin A. Kana²

¹ University of Michigan, Ann Arbor, MI, USA

² Delft University of Technology, Delft, the Netherlands

Abstract. In this paper you will find important instructions for authors of the contributions to the Proceedings using $\text{\LaTeX} 2_{\epsilon}$ system together with the class file `PRADS2025.cls`. The abstract itself should summarize the contents of the paper and should contain from 200 to 250 words. It should be written in `abstract` style in 9 pt size and 1 cm left and right text margins.

Key words: *You can list your keywords using the keywords style.*

1. Introduction

You are encouraged to use $\text{\LaTeX} 2_{\epsilon}$ system for the preparation of your contribution to the Proceedings of the 16th International Symposium on Practical Design of Ships and Other Floating Structures with the class file `PRADS2025.cls`. The \LaTeX source of these instructions can be used as a template.

In case you are not familiar with the \LaTeX system you can use MS Word. Instructions for Word users are in a separate document that can be found at PRADS 2025 website.

1.1. Files to be sent

Besides the complete \LaTeX source, including images (best as EPS files) send us a PDF file of your contribution. If you are using Bib \TeX system please include the accompanying bibliography file. We don't need the printed version of your contribution.

Please pack all your files in one of the common archives and submit them through the PRADS 2025 website.

2. Document layout

The printing area of your contribution is 122 mm \times 193 mm on A4 paper size.

Font of the manuscript should be Times New Roman and for the body of the text use 10pt size with single line spacing. Bold type and underlining should be avoided. For the notation of the manuscript authors use 10 pt font size, for their institutions 9 pt font size as well for the abstract and keywords.

3. Paper preparation

For the preparation of your contribution a complete, integrated $\text{\LaTeX} 2_{\epsilon}$ class file is provided: `PRADS2025.cls`. Papers not complying with the given style will be reformatted. This could lead to the change of the overall number of pages. The given class file should run on any standard $\text{\LaTeX} 2_{\epsilon}$ installation. If any

*Correspondence to: prads.2025@umich.edu

of the fonts, class files, or packages it requires are missing from your installation please send an email to `prads.2025@umich.edu`.

Using $\text{\LaTeX} 2_{\epsilon}$ with `PRADS2025.cls` class file your contribution will be automatically typeset in Computer Modern Roman (CM) fonts. Please do not change this preset fonts. It is also advisable to keep your own macros to a minimum.

Headings should not be capitalized and for its generation use standard $\text{\LaTeX} 2_{\epsilon}$ commands like `section`, `subsection` and `subsubsection`. Including `*` like with

```
\section*{Example of section title}
```

would omit section numbering. For *Acknowledgements* you can use

```
\subsection*{Acknowledgments}
```

like in this paper.

For cross-references please use commands `\label` and `\ref` and commands `\bibitem` and `\cite` for references to bibliography.

You can normally use command `\footnotes` for entering your footnote remarks in the body of the article.

3.1. The main elements of article $\text{\LaTeX} 2_{\epsilon}$ source

For the full compliance of your contribution with the style of the Proceedings the beginning of your $\text{\LaTeX} 2_{\epsilon}$ source should have following elements:

```
\documentclass[twoside]{PRADS2025}
\usepackage{url}

\begin{document}

\title{Title of the Contribution}
\author{First Author\ainst{1}, Someone Else\ainst{2}\fcomma\cauthor\
and Perhaps Another\ainst{1}}
\address{\ainstnum{1}Institution and address of the first and
thrid author,\
\ainstnum{2}Institution and address of the second author}

\caddress{correspondence address; you can include e-mail:
\url{my.email@my.inst}.}

\cmdndheads{First name initial, and last name of the authors}
{Short title; if original title too long}

\maketitle

\begin{abstract}
Some text for abstract
\end{abstract}
\keywords{list of key words}

\section{Introduction}
Text in the body of the article
...

\end{document}
```

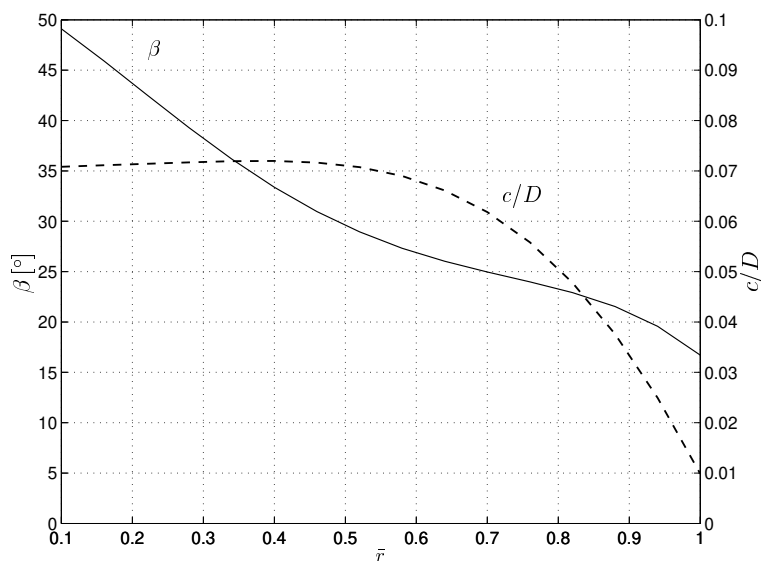


Figure 1. This example figure presents propeller geometry with β pitch angle (*solid line*) and c chord (*dashed line*) distribution along span. Sample figure with different line types can be described in caption by emphasising the elements description in *italics*.

It is important to use given commands for the notation of your institution. Commands `\ainst{1}` and `\ainstnum{1}`, in case of article with more then one author, link the author with its institution (in this case first and third author with the first institution). Also please notate the author responsible for the correspondence using the command `\cauthor` within the `\author` command and full correspondence address in `\caddress`. For e-mail address (and also for web sites) you can use command `\url{}` from `url` package.

Class file `PRADS2025.cls` defines headers for your contribution with command

`\cmdnheads{<author>}{<title>}`, however `<author>` and `<title>` should be short enough to fit into the headers.

3.2. Figures and tables

For integrating your figures we recommend using the `graphics` or `graphicx` package and the `\includegraphics` command. Line drawings should have a resolution of at least 800 dpi (preferably 1200 dpi). Figures should be numbered and should have a caption which should always be positioned under the figures, in contrast to the caption belonging to a table, which should always appear above the table. This is simply achieved as matter of sequence in your source. Example for `figure` environment (example for `table` environment can be found later in this section; Table 1., page 4):

```
\begin{figure}
  \centering
  \includegraphics[width=10cm]{samplefig.eps}
  \caption{This example figure presents ...}
  \label{fig:1}
\end{figure}
```

Please center the figures or your tabular material by using the `\centering` command. Short captions are centered by default between the margins and typeset in smaller font (Figure 1. shows an example). In order to ensure a reasonable quality of the reproduction of your illustrations we do not advise usage of shading. The contrast between the elements of the illustration should be as pronounced as possible. If program screenshots are necessary, please make sure that you are happy with the print quality before you send the files.

Table 1. An example table

k	$H_k(\xi)$	$\langle H_k^2 \rangle$
0	1	1
1	ξ	1
2	$-1 + \xi^2$	2
3	$-3\xi + \xi^3$	6
4	$3 - 6\xi^2 + \xi^4$	24

```
\begin{table}
\caption{An example table}
\centering
\begin{tabular}{c|c|c}\hline
 $k$  &  $H_k(\xi)$  &  $\langle H_k^2 \rangle$  \\ \hline
0 & 1 & 1 \\
1 &  $\xi$  & 1 \\
2 &  $-1 + \xi^2$  & 2 \\
3 &  $-3\xi + \xi^3$  & 6 \\
4 &  $3 - 6\xi^2 + \xi^4$  & 24 \\ \hline
\end{tabular}
\label{sample-table}
\end{table}
```

3.3. Formulas

Equations or formulas are centered and set in a separate line with extra space above and below, and they also should be numbered for reference. The equation numbers should be consecutive within your contribution and should be written in parentheses on the right margin. This can be easily achieved with the `equation` environment, like for example

$$f_u(u^*) = \frac{d\theta}{du^*} \quad (1)$$

Source for the example equation (1) would be:

```
\begin{equation}\label{eq:1}
f_u(u^{\star})=\frac{d\theta}{du^{\star}}
\end{equation}
```

3.4. References

For the references you can use the `thebibliography` environment: to initiate the references list use command `\begin{thebibliography}{99}` which automatically defines section *References* without assigned number. Each reference defined with `\bibitem{<label>}` can be cited in the body of the article with `\cite{<label>}`. In the output these labels are replaced with numbers in the square brackets. Reference entries should be printed in order of citation in a smaller font. Parameter `{99}` in the command for start of reference list defines widest number of a reference. Examples are given at the end of this article to present the general style of references. The reference list is completed with the command `\end{thebibliography}`

You can also use BibTeX application for the generation of the reference list instead of using `thebibliography` environment it would have a form like

```
\bibliographystyle{unsrt}
\bibliography{sample}
```

The citation rule remains the same i.e. you should use `\cite{<label>}` where the `<label>` is defined within a separate file `sample.bib`.

3.5. Program code

Program listings or program commands in the text are normally set in typewriter font, e.g., CMTT10 or Courier.

3.5.1. Example of the Computer Program

Example from [5]:

```
int fact(int number)
{
    if (number == 0)
        return (1);
    /* else */
    return (number * fact(number-1));
}
```

Acknowledgments

For *Acknowledgments* the heading should be treated as a subsection heading and should not be assigned a number.

References

- [1] M. Goossens, F. Mittelbach and A. Samarin. *The L^AT_EX Companion*. Addison-Wesley, Boston, MA, USA, 1994.
- [2] H. Kopka and P.W. Daly, *A Guide to L^AT_EX 2_ε: Document Preparation for Beginners and Advanced Users*. Addison-Wesley, Boston, MA, USA, 2nd edition, 1995.
- [3] L. Lamport. *L^AT_EX: A Document Preparation System*. Addison-Wesley, Boston, MA, USA, 2nd edition, 1994.
- [4] T. Oetiker. *The (Not So) Short Introduction to L^AT_EX 2_ε*. Available online from <http://ctan.tug.org/tex-archive/info/lshort/english/lshort.pdf>
- [5] S. Oualline. *Practical C Programming*. O'Reilly & Associates, Inc., Sebastopol, CA, USA, 3rd edition, 1997.
- [6] D. Quagliarella and A. Vicini. Coupling genetic algorithms and gradient based optimization techniques. In D. Quagliarella, J. Périaux, C. Polini and G. Winter, editors, *Genetic Algorithms and Evolution Strategies in Engineering and Computer Science*, pages 289–309. John Wiley and Sons, Chichester, 1997;
- [7] W.G. Jin, Y.K. Cheung and O.C. Zienkiewicz. Trefftz method for Kirchhoff plate bending problems. *International Journal for Numerical Methods in Engineering*, 36(5):765–781, 1991.
- [8] Interconnect Performance page. <http://www.scl.ameslab.gov/Projects/ClusterCookbook/icpef.html>, February 10th 1999.