Paper style and format for the 11th International Symposium on Turbulence, Heat and Mass Transfer

K. Hanjalić¹, K.Suga² and M. Tanahashi³

Abstract – This document describes the requested paper style and layout for preparing the manuscripts (extended abstracts/ final papers¹ and full-length keynote papers) for the 11th International Symposium on Turbulence, Heat and Mass Transfer – THMT'25, to be held in Tokyo, Japan, on July 21–25, 2025. Abstracts of the manuscripts should not contain more than 150 words.

1. Introduction

All papers that will appear in the Proceedings should strictly adhere to the style and format outlined here. Please note the unified first-page and the rest-pages headings, which must appear in all papers. Please use the templates available and read carefully the instructions. Note that the layout generated by this style file is based on A4 paper. The chosen font size is 12pt. *Do not stretch the page-width or -length in order to squeeze in more words or lines of text!* A new paragraph (except the first one after the section/subsection heading) should begin with an indent of 3 letter spaces (as shown here). *Do not use space to separate paragraphs*.

You should submit your document as an *editable unprotected* **PDF** file. You may also be requested to send by e-mail the source files so that the organizers can make some minor format adjustment if needed, to avoid unnecessary submission iterations.

2. Layout

The font type should be Times Roman, 12pt size. The text width should be 160 mm, with left-and right-hand side margins of 25 mm. The text height is 240 mm, with a bottom margin of 25 mm. The top margin is 18 mm. The vertical space between the running heads and the body of the text is 9 mm. The running head itself is 3 mm high. *Please insert page numbers in Final and Full-length Keynote Papers*.

3. Running Heads

Note that the running title on all *even* pages should be *Turbulence*, *Heat and Mass Transfer 11* (Times New Roman, italic font 12pt, right justified). On the *odd* pages, apart from the first page, you should make your own running head, where you put the initial(s) and the surname of the author of the paper. If the paper has *two* authors, you should put the names of *both* authors. If

¹Department of Chemical Engineering, Delft University of Technology, Van der Maasweg 9 2629 HZ Delft, The Netherlands, <u>k.hanjalic@tudelft.nl</u>

²Department of Mechanical Engineering, Osaka Metropolitan University, 1-1, Gakuen-cho, Naka-ku, Sakai 599-8531, Japan, <u>suga@omu.ac.jp</u>

³Department of Mechanical Engineering, Institute of Science Tokyo, 1-2-1, Meguro-ku, 152-8550, Tokyo, Japan, tanahashi.m.aa@m.titech.ac.jp

 $^{^{1}}$ Proceedings will contain the final papers (4–8 pages) and full-length keynote papers (\leq 12 pages).

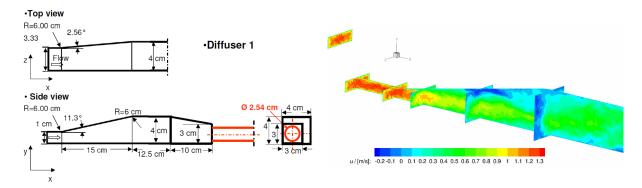


Figure 1: Geometry of the diffuser considered (Cherry et al., 2008) (left) and the instantaneous velocity field obtained by LES (right).

the paper has three or more authors, you should put only the name of the *first* author, followed by *et al*.

4. Paper Title

The paper title is typeset left-justified in 20pt font size (see this document). *Do not use the uppercase letters for each word, only the Initial Capital and where it is needed*! The vertical spacing of the tittle should be 20pt before and 15pt after.

5. Author Names and Affiliations

The author names should be typeset in 14pt font size, whereas the affiliations with the e-mail address of the corresponding author should be given in 12pt italic font (see this document).

6. Sections and Subsections

The section titles are typeset in 14pt boldface font. For the section titles, please use Initial Capitals for each word (see this document). The vertical space between section titles and the body of the text is 2 mm. The vertical space between the body of the text and the next section title is 7 mm.

6.1 Subsections and subsubsections

The subsection titles are typeset in 12pt boldface font and should be typed using an Initial Capital and the rest in lower case (see this document).

6.1.1 Subsubsections and paragraphs

The subsubsections and paragraphs titles are typeset in 12pt italic font.

7. Figures

All figures, graphs and line drawings should be clear, sharp and of high quality, as shown in Fig. 1. All figures/photographs should be numbered consecutively and captioned. The caption should be 11 pt, using upper and lower case letters as appropriate, flushed left under the figure.

K. Hanjalić et al.

8. Equations

The equations appearing in your paper should be numbered consecutively. In general, equations should be centered on the page. The equation numbers should be flush right. An equation can and should look like the one provided:

$$\frac{\partial \overline{U_i}}{\partial t} + \frac{\partial \left(\overline{U_i}\overline{U_j}\right)}{\partial x_i} = -\frac{1}{\rho} \frac{\partial \overline{p^*}}{\partial x_i} + \frac{\partial}{\partial x_i} \left[\left(v + v_m \right) \left(\frac{\partial \overline{U_i}}{\partial x_i} \right) \right] \tag{1}$$

9. Referencing

The sample references are given at the end of this document. Please note that there is *no extra vertical space between consecutive items*. Within the text, references should be cited by quoting the last name of the author(s) and the year of publication of the reference. Whether or not the name of the author(s) should be enclosed within the parentheses depends on the context. The two possibilities are illustrated below:

It was shown by Hattori et al. (2001) that the free stream turbulence influences strongly the combined-convective boundary layer along the vertical heated plate.

or

It has been shown that the free stream turbulence influences strongly the combined-convective boundary layer along the vertical heated plate (Hattori et al. 2001).

10. Paper Length and Copyrights

Extended Abstracts should be between 2 to 4 pages in length and must use this template. Authors of accepted extended abstracts must submit Final Papers (4–8 pages). For keynote lectures, Full-length Keynote Papers of up to 12 pages will be published.

The keynote and all accepted papers will be accessible to the registered participants. The proceedings containing copyright transferred contributing papers will be published after the symposium by Begell House Inc., New York (indexed in Web of Science and Scopus citation databases). We also accept OA (open access) papers, which will not be published in this formal proceedings, and for which authors retain their copyright without transferring it to the publisher. If you choose OA, please uncomment line 26, "% \OAtrue", in this LATEX template to enable it. Please refer to Table 1 and use it as a template for creating your own table.

Table 1: Paper length and copyrights.

| Type | Length | Copyright | To registered | In Proceedings |
|---------------------------|-----------|-----------|---------------|----------------|
| | [pages] | transfer | participants | |
| Extended Abstract | 2–4 | No | Not published | Not included |
| Final Paper | 4–8 | Required | Published | Included |
| Final Paper - OA | 4–8 | No | Published | Not included |
| Full-length Keynote Paper | ≤ 12 | Required | Published | Included |

11. Paper Submission

Extended Abstracts of 2–4 pages including supporting illustrations as appropriate, should be electronically submitted to www.thmt-25.org following the instructions described in the Submission section, before **November 30, 2024**. Notification of acceptance will be dispatched by February 28, 2025.

The authors of accepted contributions are invited to submit Final Papers (4–8 pages) in the **PDF format** electronically to www.thmt-25.org. Use this template and comply strictly with the format and style. Papers submission deadlines: **April 30, 2025** both for the Final and Full-length Keynote papers.

12. Journal Special Issues

Selected papers presented at the Symposium will be published in special issues of international journals (*Flow, Turbulence and Combustion*, Springer, and *International Journal for Heat and Fluid Flow*, Elsevier).

13. Information

If you encounter problems, please contact Executive Committee: E-mail: contact@thmt-25.org, URL: https://www.thmt-25.org

Acknowledgements

Acknowledgements can be given in a separate section after the conclusions but before the list of references. It should be declared as a *numberless* section.

References

- E.M. Cherry, C.J. Elkins and J.K. Eaton. Geometric sensitivity of three-dimensional separated flows. *Int. J. Heat and Fluid Flow*, 29: 803–811, 2008.
- K. Hanjalic and S. Jakirlić. Second-Moment Turbulence Closure Modelling. In *Closure Strate-gies for Turbulent and Transitional Flows (Edited by B.E. Launder and N. Sandham)*, pp. 47–101, Cambridge University Press, 2002.
- Y. Hattori, T. Tsuji, Y. Nagano and N. Tanaka. Effects of freestream on turbulent combined-convection boundary layer along a vertical heated plate. *Int. J. Heat and Fluid Flow*, 22: 315–322, 2001.
- H. Pascal, S. Jakirlić and K. Hanjalić. DNS and RANS-modelling of in-cylinder turbulence subjected to axial compression. In *Third Int. Symp. on Turbulence, Heat and Mass Transfer (Edited by Y. Nagano, K. Hanjalić and T. Tsuji)*, pp. 479–486, 2000.