

# Instructions for papers prepared with LaTeX to be presented at the 5<sup>th</sup> European Conference for Aeronautics and Space Sciences

*First Author\* and Second Author\*\**

*\*First Author's Affiliation*

*First Author's Address*

*\*\*Second Author's Affiliation*

*Second Author's Address*

## Abstract

This document is the LaTeX template to be used for the 5<sup>th</sup> European Conference for Aeronautics and Space Sciences which will take place in Munich, Germany, on July 1–5, 2013. Please note, that this template is regarded experimental and might be updated or revoked if problems are found before manuscript deadline. In general, the word template is regarded binding. The easiest way to proceed is to simply insert your paper directly into this template. Please follow precisely the instructions, so that all papers have a similar presentation. The abstract should be limited to a maximum of 100 words. It must summarize the paper in an explicit way, in particular, the methods used, the main results, and the conclusions. The paper abstract and title must faithfully reflect its content.

## 1. Introduction

This example illustrates the paper layout and presents the various requirements that you should respect before submitting your paper. The papers will be typeset on A4 paper with top, lateral and bottom margins of 30, 22 and 25 millimeters respectively. A single column format is to be used. The paper should be typeset in either Times or Times New Roman font, 10 point size. The section and subsection titles should be typeset according to the format and weight of the present template.

### 1.1 Equations

Equations must be centered and right numbered. An empty line must be inserted before and after the equation:

$$\chi_1[\tilde{r}] = C_1 + i \left( \tilde{r}_m^2 |n_s - n_c| \sqrt{(\tilde{r}_m^2 - \tilde{r}_1^2)} \right)^{-1} \times \\ c\Pi \left[ 1 - \frac{\tilde{r}_2^2}{\tilde{r}_m^2}; \arcsin \left[ \sqrt{\frac{\tilde{r}_m^2 - \tilde{r}_2^2}{\tilde{r}_m^2 - \tilde{r}_2^2}} \right] \left| \frac{\tilde{r}_2^2 - \tilde{r}_m^2}{\tilde{r}_1^2 - \tilde{r}_m^2} \right| \right] \quad (1)$$

### 1.2 Mathematical formulas inserted in the text

Simple fractions inserted in the text must include parentheses where needed to avoid any confusion, for example to distinguish between  $1/(n-1)$  et  $1/n-1$ . Fractions must be aligned in the text using the slash (/) symbol, except for fractions such as  $\frac{1}{2}$ . Limits of summations and integrals appearing in the text such as  $\frac{1}{2} \sum_{n=1}^{n=\infty} (n^2 - 2n)^{-1}$  must be placed right of the symbol in order to reduce the amount of white space appearing in the text. Besides, oversized symbols must not be used.

### 1.3 General recommendations regarding notations

**Notations** must be legible, clear, compact and consistent with the usual standards. In general, acronyms should be defined when first used.

**Radical signs.** Oversized radical signs should be avoided whenever possible through the use of the  $1/2$  exponent notation. For example, replace  $\sqrt{(a+b)(a-c)}$  by  $[(a+b)(a-c)]^{1/2}$ .

**Exponential signs.** Avoid exponential signs such as  $e^{jkl}$ . Use instead the alternative notation  $\exp, \exp(jkl)$ .

**Multiplications.** In general, typeset multiplications as  $p_y t_{io}$ . Use the  $\times$  symbol if the multiplication sign is really essential ( $1 \times 10^2$ ) or to indicate the continuation of an equation [see Eq. (1) above]. Use the centred dot for scalar products only ( $k \cdot k$ ).

**Units.** Use SI units and conventions whenever appropriate. The value and the unit symbol shall be separated by a non-breaking space. Symbols for derived units formed by multiplication are joined with a centre dot ( $\cdot$ ) or a non-breaking space, e.g.  $N \cdot m$  or  $N\ m$ , while symbols for derived units formed by division are joined with a solidus (/) or given as a negative exponent, e.g.  $m/s$  or  $m\ s^{-1}$ .

**Decimal marker.** The symbol for the decimal marker shall be the point on the line.

**Thousands separators.** Commas or periods must not be used as a thousands separator in order to reduce confusion resulting from the variation between these forms in different countries. In contrast, thin spaces should be used as a thousands separator (10 000 000) or the number of digits might be reduced using the prefixes for the SI units.

## 2. Figures and tables

Particular care should be observed for the preparation of **diagrams** and **figures**. Colour should be used only when it helps improve understanding. Figures must be centred. Captions must be typeset in 10 point size and the first letter must be capitalized. Please do not include captions as part of the figures and do not put captions in separate text boxes linked to the figure.

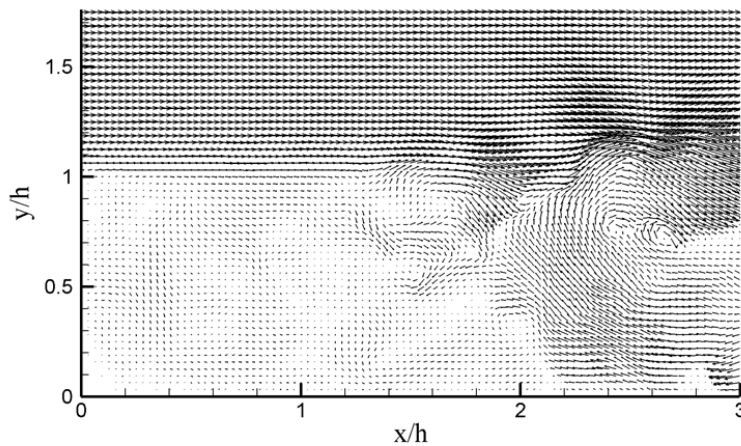


Figure 1: Example

**Tables** must be numbered. Table captions must be compact and positioned above the table. Detailed explanations or notes must be placed directly under the table as in the following example. Tables must include horizontal rules to clearly indicate the table limits and the column headers. In general, no other rules should be used.

Table 1: This is a table example

	Case 1	Case 2	Case 3
Observation	10	13	5
Relative frequency	0.198 <sup>a</sup>	0.2	0.1

<sup>a</sup> Remark or comment

### 3. Paper length/file size

The paper should not exceed 15 pages. Please upload your file in plain portable document format (pdf) only, i.e. the file should not be protected nor in any other format. The submitted pdf-file should not exceed 10 Megabytes. If your file is much larger, there is probably a figures resolution problem. This should be fixed when creating the pdf file. The editorial team will take care of protecting the paper after verification of the layout.

### References

References must be numbered in the text in the following style [3] and listed at the end of the paper in the following way.

- [1] Degrez, G., P. Barbante, M. de la Llave, T. Magin, and O. Chazot. 2001. Determination of the catalytic properties of TPS materials in the VKI ICP facilities. In: *3rd ECCOMAS Computational Fluid Dynamics Conference*. 162–167.
- [2] Magin, T., and G. Degrez. 2004. Transport algorithms for partially ionized and unmagnetized plasmas. *J. Comput. Phys.* 198:424–449.
- [3] AGARD. 1998. A selection of test cases for the validation of large eddy simulations of turbulent flows. Agard Advisory Report 345. North Atlantic Treaty Organization.
- [4] Rini, P. 2006. Analysis of differential diffusion phenomena in high enthalpy flows, with application to thermal protection material testing in ICP facilities. PhD Thesis. Université Libre de Bruxelles, Faculty des Sciences Appliquées.