Authors' Instructions for ECCOMAS Multibody Dynamics 2023 Extended Abstracts

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EXTENDED ABSTRACT

1 Introduction

This document contains submission instructions, LaTeX/Word layout information and document structure recommendations for extended abstracts to be submitted to the ECCOMAS Multibody Dynamics 2023 Conference. The style file "mbd23_abstract.cls" is available for automatic layout generation in LaTeX. The template files "ECCOMAS_MBD_2023_InstructionForAuthors.tex" and "ECCOMAS_MBD_2023_InstructionForAuthors.docx" are available for editing in LaTeX and Word, respectively.

2 Submission instructions

Only original contributions will be considered for presentation at the ECCOMAS Multibody Dynamics 2023 Conference. The extended abstract should convey the main ideas and contributions of the presented work, including their methods and advances with respect to existing literature and state of the art, such as to allow a methodological assessment of the novelty of the work.

Submission of extended abstracts should be done exclusively through the user account (MyAccount) at the Conference webpage. The submission steps comprise the registration to the Conference Management System and uploading of the camera-ready PDF file of the extended abstract.

3 Layout information

The extended abstract should be written in English and may not exceed two A4 pages in the format specified below and shown in this template.

For Word source files, please use the Word template for editing your submission, without changing margins, font types, line spacing, etc.

For LaTeX source files, all formatting commands are already pre-defined in the LaTeX style file "mbd23_abstract.cls" and are generated automatically when using the corresponding structure elements (\section{…}, \caption{…}, etc.).

The extended abstract should begin with the centered heading **EXTENDED ABSTRACT** in bold capital letters at the top of the text main body after the authors' affiliations (as shown above in this template).

The **list of authors** should contain their affiliations and e-mail addresses as shown above. The superscript reference marks may be omitted if all authors are from the same affiliation. In case of two or more authors, please underline the name of the author who will present the paper at the conference if already known.

Table 1: Font sizes and styles

Style Element	*Word example*	*LaTeX*
title	**Title**	\bf\large
list of authors	Firstname Lastname	\normalsize
list of authors' institutions	Organization	\small
normal text	normal text	\normalsize
headings (only 1 level)	**Section, References**	\bf\normalsize
figure and table captions	Figure caption	\small
references	[1] B. Etkin and L.D. Raid…	\normalsize

The **text body** should have dimensions 180mm width and 247mm height with 17.5 mm margin from the left and 15 mm margin from the top. Line alignment should be fully justified to text width. Font type and size for the main text should be Times New Roman 10pt in LaTeX and Times New Roman 10bp in Word. **Section headings** should be bold in normal text size. Further font size and style instructions are summarized in Table 1 both for Word and for Latex.

Headers and footers should not be defined by the authors as they will be finally typeset during the process of completion of the Book of Abstracts.

Equations should be centered in a separate line with extra space above and below and should be numbered with consecutive numbers in parenthesis to the right as for example equation (1):

$$\begin{bmatrix} \mathbf{M} & \mathbf{\Phi}^{\mathrm{T}} \\ \mathbf{\Phi} & \mathbf{0} \end{bmatrix} \begin{bmatrix} \ddot{\mathbf{s}} \\ \boldsymbol{\lambda} \end{bmatrix} = \begin{bmatrix} \mathbf{p}_1 \\ \mathbf{p}_2 \end{bmatrix}. \tag{1}$$

Figures should be centered and numbered consecutively and should have a centered caption under the figure as shown in Figure 1. Line drawings, if in raster format, should have a resolution of at least 600 dpi. Vector graphics are preferred to raster graphics. When using color graphics, shadings and/or screen shots, please verify printing and contrast quality on a black and white printer before submitting as the Book of Abstracts handed out in the conference will be in black and white only.

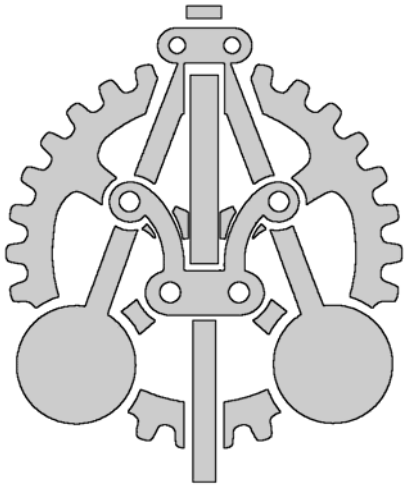

Figure 1: Sample figure representing a guided motion

Tables should be centered with centered caption above the table as shown in Table 1 above.

Reference entries should be listed in order of citation and referenced in the text by square brackets, e.g. [1]. Examples are given at the end of this article to present the general style for references.

4 Document structure recommendations

A typical extended abstract contains an introduction with state of the art, a problem description, the applied methods, the obtained results, their discussion, as well as a conclusion followed by a list of most significant references. Section headings are optional apart from Acknowledgements (if applicable) and References.

Acknowledgments

The Acknowledgments heading should be treated as a section heading with no number assigned to it.

References

[1] O. A. Bauchau. Flexible Multibody Dynamics. Springer, Dordrecht, 2011.

[2] W. Schiehlen. Multibody system dynamics: Roots and perspectives. Multibody System Dynamics, 1:149-188, 1997.

[3] A. Author. Numerical solution of multibody dynamical systems in interaction with fluid. In E. Editor and C. Coeditor, editors, Proceedings of the International Symposium on Computational Mechanics, pages 215-217. University of Mechanics, City, 2016.