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CONTACT MECHANICS

TRACK NUMBER 1500 - FLUID-STRUCTURE INTERACTION, CONTACT AND INTERFACES

M. RAOUS*, P. WRIGGERS †, AND G. ZAVARIZE††

* Laboratoire de Mécanique et d'Acoustique, CNRS, Aix-Marseille Univ, Centrale Marseille,
4 impasse Nikola Tesla, 13453 Marseille Cedex 13 - France
raous@lma.cnrs-mrs.fr

† Institut of Continuum Mechanics – Leibniz Universität Hannover
Appelstrasse 11, D-30167 Hannover - Germany
wriggers@ikm.uni-hannover.de

†† Department of Structural, Geotechnical and Building Engineering – Politecnico di Torino
Corso Duca degli Abruzzi 24, I-10129 Torino - Italy
giorgio.zavarise@polito.it

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ABSTRACT

Although considerable progress has been achieved in the last decades on Contact Mechanics, many problems are still open. The research field is still growing and diversified in many directions. Indeed, the research in contact mechanics has many facets which can be classified into understanding of physical phenomena, numerical simulations and industrial applications.

Areas of interest have a broad range. A general list of pertinent subjects includes: adhesion, friction and wear, rolling contact in the area of multi-scale, multi-physics and coupled multi-field problems. Furthermore, contact at nanoscales, contact dynamics and biomechanical contact problems can be mentioned. Numerical simulation involves specific topics, like: discretization techniques, constraint enforcement methods, contact detection algorithms, discrete elements techniques, fast solvers for constraint problems.

The minisymposium will provide a wide forum for scientists and young researchers, which allows discussion of the most recent advances and the perspectives for future developments in contact mechanics.

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