

# CMND2009

## International Symposium on Coupled Methods in Numerical Dynamics

## PROGRAM

**Wednesday, September 16, 2009**

8 <sup>00</sup> - ...	Registration
9 <sup>30</sup> - 10 <sup>30</sup>	Opening
10 <sup>30</sup> - 11 <sup>15</sup>	<b>The Challenges of High Fidelity Industrial CFD</b> Charles Hirsch, Numeca International, Belgium
11 <sup>15</sup> - 12 <sup>00</sup>	<b>Radial Basis Function Interpolation for Computational Fluid-Structure Interaction</b> Hester Bijl et. al., Delft University of Technology, The Netherlands
12 <sup>00</sup> - 14 <sup>00</sup>	<i>Lunch</i>
14 <sup>00</sup> - 14 <sup>45</sup>	<b>From Fluid Mechanics to Acoustics</b> Wolfgang Schröder, RWTH Aachen University, Germany
14 <sup>45</sup> - 15 <sup>15</sup>	<b>An Implicit LU-SGS Algorithm for High-Order Spectral Difference Method on Unstructured Grids for Turbulent Compressible Flows</b> M. Parsani, K. Van den Abeele, D. Vucinic and C. Lacor, Vrije Universiteit Brussel, Belgium
15 <sup>15</sup> - 15 <sup>30</sup>	<i>Coffee break</i>
15 <sup>30</sup> - 16 <sup>00</sup>	<b>Active Control of Sound Transmission Through a Model Aircraft Panel</b> N. Alujević, P. Gardonio and K. D. Frampton, University of Split, Croatia
16 <sup>00</sup> - 16 <sup>30</sup>	<b>Stress Based Identification of Non-Linear Material Behaviour by Inverse Modelling</b> I. Vasilakos and H. Sol, Vrije Universiteit Brussel, Belgium
16 <sup>30</sup> - 17 <sup>30</sup>	<i>Reception at FESB</i>

<b>Thursday, September 17, 2009</b>				
9 <sup>00</sup> - 9 <sup>45</sup>	A Unified Approach to Trajectory Optimization and Parameter Estimation in Vehicle Dynamics Carlo L. Bottasso et. al., Politecnico di Milano, Italy			
9 <sup>45</sup> - 10 <sup>25</sup>	<b>Lagrangian Modelling of Electro-Magneto-Mechanical Systems with Hysteresis</b> A. Müller, University Duisburg-Essen, Germany			
10 <sup>25</sup> - 10 <sup>40</sup>	<i>Coffee break</i>			
10 <sup>40</sup> - 11 <sup>20</sup>	<b>Differential-Geometric Modeling and Integration of Multibody Systems</b> Z. Terze, University of Zagreb, Croatia			
11 <sup>20</sup> - 12 <sup>00</sup>	<b>Modeling and Model-Based Controller Design for Vibration Reduction of a Scanning Tunneling Microscope</b> J. Lu and P. Eberhard, University of Stuttgart, Germany			
12 <sup>00</sup> - 14 <sup>00</sup>	<i>Lunch</i>			
14 <sup>00</sup> - 14 <sup>45</sup>	<b>Advances in Computational Fluid-Structure Interaction – Formulations and Solvers</b> Wolfgang A. Wall et. al., Technische Universität München, Germany			
14 <sup>45</sup> - 15 <sup>15</sup>	<b>Numerical Fluid-Structure Interaction of Multibody Dynamical Systems in Incompressible Flow</b> Z. Terze, D. Matijašević and M. Vrdoljak, University of Zagreb, Croatia			
15 <sup>15</sup> - 15 <sup>30</sup>	<i>Coffee break</i>			
15 <sup>30</sup> - 16 <sup>00</sup>	<b>Symbolic Modeling and Analysis of Elastic Multibody Systems</b> T. Kurz and P. Eberhard, University of Stuttgart, Germany			
16 <sup>00</sup> - 16 <sup>30</sup>	<b>Virtual Mass Measurement of Cantilever Beam Partially Submerged in Fluid</b> D. Sedlar, Ž. Lozina and D. Vučina, University of Split, Croatia			
	<i>Social program: Banquet dinner</i>			
<b>Friday, September 18, 2009</b>				
9 <sup>00</sup> - 9 <sup>45</sup>	Designing a TransCruiser Aircraft by Simulation: From Specification to Windtunnel Test Arthur Rizzi et. al., The Royal Institute of Technology (KTH), Sweden			
9 <sup>45</sup> - 10 <sup>15</sup>	<b>Numerical and Experimental Study of the Flapping Wing Induced Flow for Micro-Air-Vehicles Propulsion</b> M. Ahmadi Bidakhvidi, D. Vucinic, S. Vanlanduit and C. Lacor, Vrije Universiteit Brussel, Belgium			
10 <sup>15</sup> - 10 <sup>45</sup>	<b>About the Estimation of the Required Power for a Helicopter in Forward Flight</b> J. Župan and M. Vrdoljak, University of Zagreb, Croatia			
10 <sup>45</sup> - 11 <sup>00</sup>	<i>Coffee break</i>			
11 <sup>00</sup> - 11 <sup>40</sup>	<b>Airflow and Aerosol Transport in a Human Mouth-Throat Geometry</b> S. Jayaraju, C. Lacor, D. Vucinic, F. Maes and S. Verbanck, Vrije Universiteit Brussel, Belgium			
11 <sup>40</sup> - 12 <sup>10</sup>	<b>A Non-Destructive Wind Turbine Blade Analysis Based on the Thermal Stress Analysis</b> L. Krstulović-Opara, B. Klarin and Ž. Domazet, University of Split, Croatia			
12 <sup>10</sup> - 14 <sup>00</sup>	<i>Lunch</i>			
14 <sup>00</sup> - 14 <sup>40</sup>	<b>Application of Shape Memory Alloys in Middle Ear Surgery</b> A. Eiber, University of Stuttgart, Germany			
14 <sup>40</sup> - 15 <sup>10</sup>	<b>Control Approaches for a 3D-Pendulum on Display at the EXPO 2010</b> T. Gorius, R. Seifried and P. Eberhard, University of Stuttgart, Germany			
15 <sup>10</sup> - 15 <sup>40</sup>	<b>Active Vibration Control of Electro-Mechanical System With Step Excitation and Electromagnetic Actuator</b> Ž. Lozina, D. Vučina and D. Sedlar, University of Split, Croatia			
15 <sup>40</sup> - 16 <sup>00</sup>	<i>Closing remarks</i>			
	<i>Social program: City walk</i>			

legend: invited lecture keynote paper open program preliminary report

Venue: Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB), Split, Croatia  
<http://cmnd2009.fsb.hr>