

PROGRAMME 2014

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Rectors:

E. Guazzelli (Marseille)

F. Pfeiffer (Munich)

F.G. Rammerstorfer (Vienna)

In 2014 the following Sessions of the International Centre for Mechanical Sciences (CISM) will take place at the seat of CISM in Udine (Italy)

The J. Carlos Simo Session

Complex Viscous Flows

May 19 - 23

Invited Lecturers:

Maria Ekiel-Jezewska (Warsaw, Poland), Henry Power (Nottingham, UK), Osamu Sano (Tokyo, Japan), Anne-Virginie Salsac (Compiègne, France), Antoine Sellier (Palaiseau, France), Petia Vlahovska (Providence, RI, USA).

Coordinators: A. Sellier, O. Sano.

Collective Dynamics of Particles: from Viscous to Turbulent Flows

May 26 - 30

COST-ERCOTAC Training School

Invited Lecturers:

Gilles Bouchet (Aix-Marseille, France), John Hinch (Cambridge, UK), Martin Maxey (Providence, RI, USA), Jason Butler (Gainesville, FL, USA), Michael Bourgoin (Grenoble, France), Holger Homann (Nice, France).

Coordinators: G. Bouchet, C. Marchioli.

Extremely Deformable Structures

June 2 - 6

Invited Lecturers:

Davide Bigoni (Trento, Italy), Basile Audoly (Paris, France), Katia Bertoldi (Cambridge, MA, USA), Alain Goriely (Oxford, UK), Sébastien Neukirch (Paris, France), Pedro M. Reis (Cambridge, MA, USA).

Coordinator: D. Bigoni.

Topology Optimization of Structures and Continua - Computational Aspects and Background

June 9 - 13

Invited Lecturers:

Ole Sigmund (Lyngby, Denmark), Kurt Maute (Boulder, CO, USA), Krister Svanberg (Stockholm, Sweden), Pierre Duysinx (Liege, Belgium), Glaucio Paulino (Urbana, IL, USA), George I.N. Rozvany (Budapest, Hungary).

Coordinators: G.I.N. Rozvany, G. Paulino.

Mechanobiology of Cells and Tissues: Motility and Morphogenesis

June 16 - 20

Invited Lecturers:

Antonio De Simone (Trieste, Italy), Marino Arroyo (Barcelona, Spain), Daniel Fletcher (Berkeley, CA, USA), Ray Goldstein (Cambridge, UK), Frank Jülicher (Dresden, Germany), Ewa Paluch (London, UK).

Coordinators: A. De Simone, M. Arroyo.

Flowing Soft Matter: Bridging the Gap between Statistical Physics and Fluid Mechanics

June 30 - July 4

Invited Lecturers:

A. Morozov (Edinburgh, UK), Todd Squires (Santa Barbara, CA, USA), Davide Marenduzzo (Edinburgh, UK), David Saintillan (San Diego, La Jolla, CA, USA), Olivier Pouliquen (Marseille, France), Matthieu Wyart (New York, NY, USA).

Coordinators: D. Bartolo, D. Santillan.

Cavitation Instabilities and Rotordynamic Effects in Turbopumps and Hydroturbines

July 7 - 12

Invited Lecturers:

François Avellan (Lausanne, Switzerland), Steven Ceccio (Ann Arbor, MI, USA), Jean-Pierre Franc (Grenoble, France), Luca d'Agostino (Pisa, Italy), Maria Vittoria Salvetti (Pisa, Italy), Yoshinobu Tsujimoto (Osaka, Japan).

Coordinators: L. d'Agostino, M.V. Salvetti.

Structure and Multiscale Mechanics of Carbon Nanomaterials

July 21 - 25

Invited Lecturers:

Oskar Paris (Leoben, Austria), Markus Hartmann (Leoben, Austria), Claudia Draxl (Berlin, Germany), Siddhartha Pathak (Los Alamos, NM, USA), Bob Young (Manchester, UK), David Dunstan (London, UK).

Coordinator: O. Paris.

The D. Howell Peregrine Session

Electrospinning: Exploiting Electrohydrodynamics and Rheology for the Control of Nanofiber Structural and Physical Properties

September 1 - 5

Invited Lecturers:

Alexander L. Yarin (Chicago, IL, USA), Ignacio G. Loscertales (Malaga, Spain), Eyal Zussman (Haifa, Israel), Asa H. Barber (London, UK), Pawel Sajkiewicz (Warsaw, Poland), Erhan Piskin (Ankara, Turkey).

Coordinators: P. Sajkiewicz, E. Zussman.

Ferroc Functional Materials: Experiment, Modeling and Simulation

September 8 - 12

Invited Lecturers:

Kaushik Bhattacharya (Pasadena, CA, USA), Manfred Fiebig (Zurich, Switzerland), John Huber (Oxford, UK), Doru C. Lupascu (Essen, Germany), Christopher Lynch (Los Angeles, CA, USA), Jörg Schröder (Essen, Germany).

Coordinators: J. Schröder, D.C. Lupascu.

Shell-like Structures: Advanced Theories and Applications

September 15 - 19

Invited Lecturers:

Holm Altenbach (Magdeburg, Germany), Victor A. Eremeyev (Magdeburg, Germany and Rostov-on-Don, Russia), Gennady Mikhasev (Minsk, Belarus), Paolo Podio-Guidugli (Roma, Italy), Karam Sab (Marne-la-Vallée, France), Krzysztof Wisniewski (Warsaw, Poland).

Coordinators: H. Altenbach, V.A. Eremeyev.

Singular Configurations of Mechanisms and Manipulators

September 22 - 26

Invited Lecturers:

Dimitar Zlatanov (Genova, Italy), Manfred Husty (Innsbruck, Austria), Jean-Pierre Merlet (Sophia Antipolis, France), Philippe Wenger (Nantes, France), Andreas Müller (Shanghai, China).

Coordinators: D. Zlatanov, A. Müller.

Advanced Finite Element Technologies

October 6 - 10

Invited Lecturers:

Ferdinando Auricchio (Pavia, Italy), Antonio Huerta (Barcelona, Spain), Daya Reddy (Cape Town, South Africa), Jörg Schröder (Essen, Germany), Gerhard Starke (Essen, Germany), Peter Wriggers (Hannover, Germany).

Coordinators: J. Schröder, P. Wriggers.

Advanced Professional Training

Advances in Medium and High Temperature Solid Oxide Fuel Cells Technology

July 14 - 18

Invited Lecturers:

Raymond Gorte (Philadelphia, PA, USA), Massimo Santarelli (Torino, Italy), Panagiotis Tsiakaras (Volos,

Greece), Robert Steinberger-Wilckens (Birmingham, UK), Mogens Mogensen (Roskilde, Denmark), Subhash C. Singhal (Richland, WA, USA).

Coordinators: M. Boaro, A. Aricò.

Seismic Safety Assessment and Design of Industrial Plants Under Accident Conditions

October 13 - 17

Invited Lecturers:

Fabrizio Paolacci (Roma, Italy), Spyros A. Karamanos (Volos, Greece), Tomoyo Taniguchi (Tottori University, Japan), Oreste S. Bursi (Trento, Italy), Benno Hoffmeister (Aachen, Germany), Ioannis Politopoulos (Saclay, France).

Coordinators: O.S. Bursi, S.A. Karamanos.

20th CISM-IUTAM International Summer School

Multiscale Mechanobiology of Bone Remodeling and Adaptation

June 23 - 27

Invited Lecturers:

Peter Pivonka (Melbourne, Australia), Tim Skerry (Sheffield, UK), David Findlay (Adelaide, Australia), Taiji Adachi (Kyoto, Japan), Justin Fernandez (Auckland, New Zealand), Christian Hellmich (Vienna, Austria).

Coordinator: P. Pivonka.

Other Events

RoManSy - 2014 20th CISM-IFTOMM SYMPOSIUM on "Theory and Practice of Robots and Manipulators"

June 23 - 26

Co-Chairs: Marco Ceccarelli (Cassino, Italy), Victor Glazunov (Moscow, Russia).

Fundamentals and Applications of Ceria in Catalysis

July 11 - 14

Coordinators: Alessandro Trovarelli (Udine, Italy), Paolo Fornasiero (Trieste, Italy).

National Advanced Professional Training

APT courses in the fields of Structural and Geotechnical Engineering, Surveying, Environmental, Bioengineering and Industrial Engineering will be given in Italian. For all activities and meetings, please refer to our website.

Admission to Courses

Applications should reach CISM Secretariat no later than one month before the course. Name, degree, current address and course to be attended should be specified.

A limited number of academic participants, not supported by their own institutions, can be granted board and/or lodging upon application. Application for support must reach CISM Secretariat no later than two months before the course.

Detailed programmes, admission rules and on-line forms are available from the website.

The 2014 Course Booklet can be downloaded from www.cism.it/courses/

