



ICCS23 & MECHCOMP6

<https://events.unibo.it/iccs23>

Submission of abstracts through the Conference
web-site:

<https://events.unibo.it/iccs23/abstract-submission-form>

Conference Plenary Speakers

List currently being prepared

"Multiscale and Multiphysics
Modelling for Complex Materials (MMCM14)"
Professor Patrizia Trovalusci, Italy
Professor University Eduard Rohan, Czech Republic
Dr Nicholas Fantuzzi, Italy
Dr Egidio Lofrano, Italy

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23rd International Conference on Composite Structures & 6th International Conference on Mechanics of Composites (ICCS23 & MECHCOMP6)

**FEUP, Porto, Portugal
June 15–18, 2020**



International Symposium on Multiscale and Multiphysics Modelling for Complex Materials MMCM14

**Patrizia Trovalusci
Eduard Rohan
Nicholas Fantuzzi
Egidio Lofrano**

**deadline for abstracts:
31st December 2019**

Organizing Committee

Professor **Antonio J.M. Ferreira**
(University of Porto, Portugal)

Dr **Nicholas Fantuzzi**
(University of Bologna, Italy)

Dr **Michele Baccocchi**
(University of San Marino, San Marino)

MMCM14 Description

This symposium will provide a forum to present and debate several advanced computational methods for studying the behavior of materials and structures. The goal is to gather researchers (engineers, physicists, mathematicians) specialized in computational mechanics and numerical modelling for simulating the mechanics of solids and structures. The computational aspects will play a central role, but papers can focus on broad range of numerical aspects either related to the material modelling or the structural one.

In this framework, the interest and suitability of multiscale strategies will be highlighted. The focus will be set on computational issues, while still highlighting the underlying conceptual and theoretical basis.

Coordinators

Professor Patrizia Trovalusci

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University of Rome, Italy

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Website: <https://sites.google.com/a/uniroma1.it/multiscale-and-multiphysics-modelling-for-complex-materials/>

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MMCM14 Topics

With these aims in mind, contributions from all aspects of engineering applications, with particular attention to structural engineering applications, will be considered. Topics of applications will include (but not be limited to):

Materials with micro(/nano)-structure

- Composites, Fiber-Reinforced, Laminated
- Granular, Masonry-Like, Cementitious
- Biomaterials
- Random Materials
- Shape-Memory Alloys

Complex material behaviour

- Damage, Fracture, Defects, Cracks
- Non-Classical Continua, Multiphysics
- Poromechanics, Fluid Flow
- Thermomechanics, Viscosity
- Randomness and Fractals

Non-standard/Non-local continuous formulation

- Micromorphic continua
- Multifield, Configurational/Material
- Forces descriptions
- Non-local models
- Dispersive Wave Propagation

Computational Methods for non-standard continua

- Theory and Formulation for Novel Computational Methods for Materials with microstructure
- Non-standard Methods for Generalized Continua
- Coupled Discrete-Continuum Methods
- Virtual Elements Method

ICCS23 & MECHCOMP6

We welcome you to this joint event, to share your research and experiences, and to promote contacts for projects, papers and exchange of students and staff. As in the first 22 editions of ICCS and 5 editions of MECHCOMP, this 23rd ICCS and 6th MECHCOMP editions receives the support of Composite Structures, an International Journal from Elsevier. Selected papers of this joint conference will be published in Composite Structures an international journal from Elsevier (current impact factor = 4.829), details will be given during the conference. All accepted and paid abstracts will be collected in a book of proceedings online.

Special Issue to Prof. J.N. Reddy

The Journal of Composite Structures (Elsevier) will organize a Special Issue Celebrating the 75th Birthday of Professor J.N. Reddy who made very significant contributions to the topic of Composite Structures.

Expected dates:

First submission date: 31 January 2020

Submission deadline: 15 June 2020

Decision deadline: 15 October 2020.

ICCS23 & MECHCOMP6 Best Student Paper Award

The award is bestowed to the student (1000EUR) and a publication of the paper in the Composite Structures journal by Elsevier in the Special Issue. The winners will be announced at the Opening Ceremony.

The full paper (pdf) must be sent by email to Antonio Ferreira by May 15, 2020 latest. Papers without payment of registration fees by this date will be returned without review.

The full paper must be presented by the student or the supervisor at the conference.

The papers in competition will be reviewed by members of the Editorial Board of the Composite Structure Journal.

Diploma, Master or PhD students allowed to compete. Post-docs will not be accepted to compete.