



Conference Chairs

Adnan Ibrahimbegovic
UTC Compiègne – Alliance Sorbonne Université &
Institut Universitaire de France, France

Mijo Nikolić
Faculty of Civil Engineering, Architecture and Geodesy
University of Split, Croatia

Emina Hadzalic
Faculty of Civil Engineering,
University of Rijeka, Croatia

Ismar Imamović
University of Sarajevo, Faculty of Civil Engineering,
Bosnia and Herzegovina

Conference Venue

Faculty of Civil Engineering, Architecture and Geodesy
University of Split
Matice hrvatske 15
21000 Split, Croatia



ECCOMAS MSF 2027

https://eccomasmsf2027.com/

Submission of abstracts by e-mail to
info@eccomasmsf2027.com

All accepted papers will be published in the form of extended abstracts in the conference proceedings. Special issues of the scientific journals Computation and Coupled Systems Mechanics are also planned for the publication of selected papers.

Contact Information

Patrizia Trovalusci
patrizia.trovalusci@uniroma1.it
Annamaria Pau
annamaria.pau@uniroma1.it
Marco Pingaro
marco.pingaro@uniroma1.it

Deadline for abstract submission: DECEMBER 20, 2026

The 9th International Conference on Multi-Scale Computational Methods for Solids and Fluids
ECCOMAS MSF Thematic Conference

Split, Croatia
June 23rd–25th, 2027



International Symposium on

Multiscale Modelling of Microstructured Materials: nonclassical models and emerging computational methods

Patrizia Trovalusci
Annamaria Pau
Marco Pingaro

Symposium Description

This symposium will provide a forum to present and debate several advanced analytical and numerical methods for studying the behavior of complex materials. The goal is to gather researchers (engineers, physicists, mathematicians) specialized in the mechanics of solids, materials and structures.
The focus will be on computational issues, while still emphasizing the underlying conceptual and theoretical basis. In this framework, the interest and suitability of multiscale strategies will be highlighted.

Coordinators

Patrizia Trovalusci
Sapienza University of Rome, Italy
Email: patrizia.trovalusci@uniroma1.it
website: https://sites.google.com/a/uniroma1.it/patriziatrovalusci/
https://sites.google.com/a/uniroma1.it/multiscale-and-multiphysics-modelling-for-complex-materials/

Annamaria Pau
Sapienza University of Rome, Italy

Marco Pingaro
Sapienza University of Rome, Italy

Symposium 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- and nano-structure

- Composites, Fiber-Reinforced, Laminated
- Granular, Masonry-Like, Cementicious
- Biomaterials
- Random Materials

Complex material behaviour

- Damage, Fracture, Defects, Cracks
- Non-Classical Continua, Multiphysics
- Poromechanics, Fluid Flow

Non-standard/Non-local continuous formulation

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

Computational Methods and Simulations

- Coupled Discrete-Continuum
- Multiscale/homogenization
- Molecular, Dislocation Dynamics
- Multi-Domain/Concurrent
- Quantum approaches

ECCOMAS MSF thematic conference

The main idea of this thematic conference is to examine recent advances from mechanics and applied mathematics in a currently very active research domain of multi-scale modeling and computations in solid and fluid mechanics. The latter involves methods which bridge phenomena taking place at multiple scales in space and time and which ought to be placed in interaction or accounted for simultaneously in order to provide the most reliable explanations. This class of problems calls for the development and combination of different analytical tools (homogenization, asymptotic analysis) and computational methods (parallel computing, stochastic analysis) in order to advance the field towards currently relevant nonlinear applications. A number of different schools have developed in various domains of fluids and solids, both in mathematics and mechanics, with sometimes very little or no interaction between them. It is an explicit goal of this thematic conference, in the true spirit of ECCOMAS, to bring these different communities together, and thus provide a sound basis for a fruitful exchange of ideas among them.
The conference seeks also to provide a platform for learning from some of the worlds' leading specialists in analysis and design of complex engineering structures and systems, coming from aerospace, civil and mechanical engineering, material science, and in the design and analysis of numerical algorithms from applied mathematics. The main goal is elaborating the multi-field and multi-physics approach, which has significantly modified previously firm frontiers among these traditional engineering disciplines.

Important Dates

October 18, 2026: Abstract submission opens

December 20, 2026: Deadline for abstract submission

March 15, 2027: Deadline for early registration

June 23-25: Conference

July 31, 2027: Deadline for full paper submission