

FEBRUARY 19 - 20, 2026

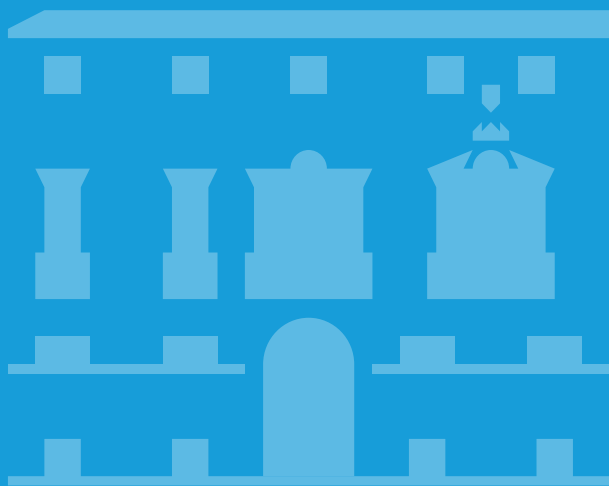
Udine, Italy

COMMON RESEARCH INTERESTS IN COMPUTATIONAL MECHANICS

3rd GACM-GIMC workshop

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Common Research Interests in Computational Mechanics

3rd GACM-GIMC workshop

SPEAKERS

Manfred Bischoff	Josef Kiendl
Mischa Blaszczyk	Sven Klinkel
Sebastian Brandstätter	Antonia Larese
Roberto Brighenti	Pietro Lenarda
Margarita Chasapi	Enzo Marino
Claudia Chianese	Bastian Oesterle
Massimiliano Cremonesi	Antonio Palermo
Maria Laura De Bellis	Alexander Popp
Antonio De Simone	Lorenzo Sanavia
Diego Dias Veloso	Nicolò Vaiana
Stefanie Elgeti	Marcello Vasta
Cristina Falcinelli	Matteo Viscoti
Steffen Freitag	Roland Wüchner
Norbert Hosters	

ORGANISING COMMITTEE

Giovanni Garcea (Università della Calabria, Italy)
Norbert Hosters (RWTH Aachen University, Germany)
Michele Marino (Università di Roma Tor Vergata, Italy)
Francesco Marmo (Università di Napoli Federico II, Italy)
Alexander Popp (Universität der Bundeswehr München, Germany)

PROGRAMME AT A GLANCE

Thursday - February 19

08.45-09.00 | opening
09.00-09.25 | **Josef Kiendl**
09.25-09.50 | **Enzo Marino**
09.50-10.15 | **Bastian Oesterle**
10.15-10.40 | **Marcello Vasta**
10.40-11.10 | coffee break
11.10-11.35 | **Stefanie Elgeti**
11.35-12.00 | **Massimiliano Cremonesi**
12.00-12.25 | **Maria Laura De Bellis**
12.25-12.50 | **Sven Klinkel**
12.50-14.10 | lunch
14.10-14.35 | **Steffen Freitag**
14.35-15.00 | **Antonio Palermo**
15.00-15.25 | **Manfred Bischoff**
15.25-15.50 | **Nicolò Vaiana**
15.50-16.20 | coffee break
16.20-16.45 | **Roberto Brighenti**
16.45-17.10 | **Margarita Chasapi**
17.10-17.35 | **Matteo Viscoti**
17.35-18.00 | **Claudia Chianese**
20.30 | social dinner

Friday - February 20

09.00-09.25 | **Roland Wüchner**
09.25-09.50 | **Antonia Larese**
09.50-10.15 | **Lorenzo Sanavia**
10.15-10.40 | **Diego Dias Veloso**
10.40-11.10 | coffee break
11.10-11.35 | **Mischa Blaszczyk**
11.35-12.00 | **Cristina Falcinelli**
12.00-12.25 | **Sebastian Brandstätter**
12.25-12.50 | **Pietro Lenarda**
12.50-14.10 | lunch
14.10-14.35 | **Antonio De Simone**
14.35-15.00 | **Alexander Popp**
15.00-15.25 | **Norbert Hosters**
15.25-15.40 | closing remarks
15.40-16.10 | farewell coffee

SCIENTIFIC PROGRAMME

Thursday - February 19

- 08.45-09.00 | opening
- 09.00-09.25 | A variationally consistent model for wrinkling in hyperelastic membranes
Josef Kiendl, UniBW Munich
- 09.25-09.50 | When space curves and shape memory materials meet: unlocking the potential of programmable morphing simulations for complex systems with applications to personalized healthcare devices
Enzo Marino, Università degli Studi di Firenze
- 09.50-10.15 | Potential of hierarchic formulations in structural mechanics across discretization schemes and solution strategies
Bastian Oesterle, TU Hamburg
- 10.15-10.40 | Growth and remodeling in soft tissue through homogenized constrained mixture models
Marcello Vasta, Università "G. d'Annunzio" di Chieti-Pescara
- 10.40-11.10 | coffee break
- 11.10-11.35 | Modeling, Simulation, and Optimization in Plastics Processing
Stefanie Elgeti, TU Vienna / RWTH Aachen
- 11.35-12.00 | A Lagrangian Finite Element Approach for the Simulation of 3D Complex Fluids
Massimiliano Cremonesi, Politecnico di Milano
- 12.00-12.25 | Modeling fluid injection induced seismicity with a cohesive-frictional model
Maria Laura De Bellis, Università "G. d'Annunzio" di Chieti-Pescara
- 12.25-12.50 | Polytopal finite element method for nonlinear problems in solid mechanics
Sven Klinkel, RWTH Aachen
- 12.50-14.10 | lunch
- 14.10-14.35 | Combination of Simulation Models and Structural Monitoring with Artificial Neural Networks
Steffen Freitag, Karlsruhe Institute of Technology

- 14.35-15.00 | Reduced-Order Modeling Strategies for Wave Propagation in Linear and Nonlinear Elastic Metamaterials
Antonio Palermo, Università di Bologna
- 15.00-15.25 | Data-based estimation of critical time steps in explicit dynamics
Manfred Bischoff, TU Stuttgart
- 15.25-15.50 | Recent computational approaches for nonlinear dynamic analysis of hysteretic mechanical systems
Nicolò Vaiana, Università degli Studi di Napoli Federico II
- 15.50-16.20 | coffee break
- 16.20-16.45 | Coupled Thermo-Mechanical Topology Optimization: an immersed FEM-Level-Set-based Approach
Roberto Brighenti, Università degli Studi di Parma
- 16.45-17.10 | Isogeometric Reduced Order Methods in Structural Mechanics
Margarita Chasapi, RWTH Aachen
- 17.10-17.35 | Multifield Analysis of Laminated Anisotropic Shell Structures with Holes and Discontinuities using Higher-Order Theories
Matteo Viscoti, Università del Salento
- 17.35-18.00 | Strain energy based isogeometric optimization of geometrically nonlinear offshore photovoltaic panels with semi-analytical sensitivities
Claudia Chianese, Università degli Studi di Napoli Federico II
- 20.30 | social dinner

Friday - February 20

- 09.00-09.25 | High-Fidelity Digital Twins - Components and computational methods for structures in complex environments
Roland Wüchner, TU Munich
- 09.25-09.50 | Unconventional actions on structures. Recent advances in the multiphysics simulation of natural hazards
Antonia Larese, Università degli Studi di Padova

- 09.50-10.15 | Multiphysics Modelling of Fracture in Non-Isothermal Multiphase Geomaterials with the Crack Phase-Field Approach
Lorenzo Sanavia, Università degli Studi di Padova
- 10.15-10.40 | A directional phase-field model for brittle fracture in orthotropic materials under load reversal
Diego Dias Veloso, University of São Paulo
- 10.40-11.10 | coffee break
- 11.10-11.35 | Computational homogenization of transport properties in deformed porous media
Mischa Blaszczyk, TU Braunschweig
- 11.35-12.00 | Micro-CT–Based Statistical Micromechanical Homogenization of Trabecular Bone for Implant Design
Cristina Falcinelli, Università “G. d’Annunzio” di Chieti-Pescara
- 12.00-12.25 | Multi-Query Analysis in Computational Mechanics: From Biomechanics to Linear Solvers
Sebastian Brandstätter, UniBW Munich
- 12.25-12.50 | Parameter Optimization of Material and Biochemical Properties of 3D Printed Constructs for Gastrointestinal Tract Wound Healing
Pietro Lenarda, IMT Lucca
- 12.50-14.10 | lunch
- 14.10-14.35 | Biomechanics of motility of unicellular organisms
Antonio De Simone, Sant’Anna Pisa, SISSA Trieste, and CISM Udine
- 14.35-15.00 | Mixed-dimensional models for computational solid and structural mechanics
Alexander Popp, UniBW Munich
- 15.00-15.25 | Addressing a Major Bottleneck in Computational Mechanics: Recent advances in Simplex Space-Time Finite Elements
Norbert Hosters, RWTH Aachen
- 15.25-15.40 | closing remarks
- 15.40-16.10 | farewell coffee



International Centre for Mechanical Sciences

VENUE

CISM - International Centre for Mechanical Sciences
Palazzo del Torso - Piazza Garibaldi 18 - 33100 Udine (Italy)

CONTACT

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