



International Centre for Mechanical Sciences

PROGRAMME 2021

The [2021 Programme](#) of CISM – International Centre for Mechanical Sciences (Udine, Italy) is online.

Unfortunately, the present pandemic situation is still very uncertain, therefore CISM is offering courses with flexible structure in order to face a mutable situation.

Even in 2021 travelling could be difficult, for this reason, though we trust in the traditional CISM courses, we are also proposing a hybrid course format (participation in presence and remotely).

Further updates will be published on the webpage of each course.

A brief summary of the 2021 programme

- **Optimization of Shape and Material Properties: Advanced Mathematical Methods and 3D Printing**

CISM–UNIUD Advanced School – <http://www.cism.it/courses/C2101/>

Coordinated by Giovanni Noselli, Rodica Toader

April 12–16, 2021

- **Composite Manufacturing Processes: Analyses, Modelling and Simulations**

Advanced Course – <http://www.cism.it/courses/C2103/>

Coordinated by Philippe Boisse, Luise Kärger

April 26–30, 2021

- **Advanced Theories for Deformation, Damage and Failure in Materials**

Advanced Course – <http://www.cism.it/courses/C2104/>

Coordinated by Holm Altenbach, Artur Ganczarski

May 03–07, 2021

- **Tribology in Manufacturing Processes**

Advanced Professional Training – <http://www.cism.it/courses/A2101/>

Coordinated by Niels Bay, Pierre Montmitonnet

May 10–14, 2021

- **Physically based modelling of superconductors and their most advanced applications**

Advanced Course – <http://www.cism.it/courses/C2105/>

Coordinated by Coordinated by B&Istrokażej Skoczec´

May 24–28, 2021

- **Data-Driven Mechanics: Constitutive Model-Free Approach**

Advanced Course – <http://www.cism.it/courses/C2106/>

Coordinated by Michael Ortiz, Laurent Stainier

May 31–June 4, 2021

- **Electro- and Magneto-Mechanics of Soft Solids: Experiments, Modeling, and Instabilities**

Advanced Course – <http://www.cism.it/courses/C2107/>

Coordinated by Kostas Danas, Oscar Lopez-Pamies

June 07–11, 2021

- **Physics of Granular Suspensions: Micro-Mechanics of Geophysical Flows**

Advanced Course – <http://www.cism.it/courses/C2108/>

Coordinated by Marco Mazzuoli, Laurent Lacaze

June 14–18, 2021

- **Instability and Bifurcation of Solids Including Coupled Field Phenomena**

25th CISM–IUTAM International Summer School – <http://www.cism.it/courses/C2109/>

Coordinated by Luis Dorfmann, Raymond W. Ogden

June 21–25, 2021

- **Exploiting the use of Strong Nonlinearity in Dynamics and Acoustics**

CISM–AIMETA Advanced School – <http://www.cism.it/courses/C2110/>

Coordinated by Oleg V. Gendelman, Alexander F. Vakakis

June 28–July 2, 2021

- **Metamaterial in Acoustics, Elastodynamics and Electromagnetism**

Advanced Course – <http://www.cism.it/courses/C2112/>

Coordinated by Habib Ammari, Agnès Maurel

July 12–16, 2021

- **Discrete Computational Mechanics of Masonry Structures**

Advanced Professional Training – <http://www.cism.it/courses/A2102/>

Coordinated by Katalin Bagi, Maurizio Angelillo

July 26–30, 2021

- **Mechanics of Smart and Bio-Hybrid Gels: Experiments, Theory, Numerical Simulation**

Advanced Course – <http://www.cism.it/courses/C2114/>

Coordinated by Mattia Bacca, Alessandro Lucontonio

August 30 – September 03, 2021

- **Bone Cell and Tissue Mechanics**

Advanced Course – <http://www.cism.it/courses/C2115/>

Coordinated by Bert van Rietbergen

September 06–10, 2021

- **Batteries - Basic Principles, Experimental Investigations and Modelling Across Scales**

Advanced Course

Coordinated by Arnulf Latz, Wolfgang A. Wall

September 20–24, 2021 - *Dates to be confirmed. Detailed information will be online soon.*

- **Computational Mechanics for Novel Designs of Advanced Materials**

CISM–ECCOMAS Advanced School – <http://www.cism.it/courses/C2117/>

Coordinated by Michele Marino, Jörg Schröder

October 4–8, 2021

- **Transport Phenomena on Textured Surfaces: Fundamentals and Applications**

Advanced Course – <http://www.cism.it/courses/C2118/>

Coordinated Darren Crowdy, Marc Hodes

October 11–15, 2021

- **Metal Additive Manufacturing: Fundamentals, Modeling, Materials, and Implementation**

Advanced Course – <http://www.cism.it/courses/C2119/>

Coordinated by Christoph Meier, A. John Hart

October 18–22, 2021

