

# Centre International des Sciences Mécaniques International Centre for Mechanical Sciences

## PROGRAMME 2022

### Charles Doering Session

#### Composite Manufacturing Processes. Analyses, Modelling and Simulations

*Coordinators:* Boisse Philippe (Lyon, F), Kärger Luise (Karlsruhe, D)

May 2 - 6

#### Advanced Professional Training on Mechanics, Tribology in Manufacturing Processes

*Coordinators:* Bay Niels (Lyngby, DK), Montmitonnet Pierre (Paris, F)

May 9 - 13

#### Physically Based Modelling of Superconductors and their Most Advanced Applications

*Coordinator:* Skoczen Blazej (Cracow, PL)

May 16 - 20

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

*Coordinators:* Danas Kostas (Palaiseau, F), Lopez-Pamies Oscar (Urbana-Champaign, IL, USA)

June 6 - 10

#### 25th CISM-IUTAM International Summer School

##### Instability and Bifurcation Phenomena of Solids including Coupled Field Phenomena

*Coordinators:* Dorfmann Luis (Medford, MA USA), Ogden Ray (Glasgow, UK)

June 13 - 17

#### Architected Materials: Design Principles and Effective Properties

*Coordinators:* Ganghoffer Jean-François (Lorraine, France), Picu Catalin (Troy, USA)

June 20 - 24

#### CISM-AIMETA Advanced School on

##### Exploiting the Use of Strong Nonlinearity in Dynamics and Acoustics

*Coordinators:* Gendelman Oleg V. (Haifa, IL), Vakakis Alexander F. (Urbana, IL, USA)

June 27 - July 1

#### 26th CISM-IUTAM International Summer School

##### Convection and Deformation in Porous Media: Geophysical and Biological Flows

*Coordinators:* De Paoli Marco (Wien, A), MacMinn Christopher (Oxford UK)

July 11 - 15

#### Materials and Electro-Mechanical and Biomedical Devices Based on Nanofibers

*Coordinators:* Kowalewski Tomasz A. (Warsaw, PL), Yarin Alexander L. (Chicago, USA)

July 18 - 22

#### Fluid Flow and Phase Change of a Solid

*Coordinators:* Berhanu Michael and Courrech du Pont Sylvain (Paris, F), Szymczak Piotr (Warsaw, PL)

July 25 - 29

### Kurt Magnus Session

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

*Coordinators:* Bacca Mattia (Vancouver, CAN), Lucantonio Alessandro (Pisa, I)

August 29 - September 2

#### Advanced Professional Training on

##### Natech Risk: Management Strategies and Resilience Towards Technological Accidents Caused by Natural Events

*Coordinators:* Cozzani Valerio (Bologna, I), Paolacci Fabrizio (Rome, I)

September 5 - 9

#### 27th CISM-IUTAM International Summer School on Sports Physics and Technology

*Coordinators:* Clanet Christophe (Palaiseau, F), Hosoi Annette (Cambridge, USA)

September 19 - 23

#### Mechanics of Strongly Inhomogeneous Multi-Component and Multi-Layered Structures

*Coordinators:* Altenbach Holm (Magdeburg, D), Prikazchikov Danila (Staffordshire, UK)

October 3 - 7

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

*Coordinators:* Ortiz Michael (Pasadena, CA, USA), Stainier Laurent (Nantes, F)

October 10 - 14