

Plenary Lectures - Mathematics

Leszek Demkowicz (U Texas at Austin, USA)	DFG Method on a New Road to Nonlinear Problems
Lars Grüne (U Bayreuth, Germany)	Optimization-Based Control for Large-Scale and Complex Systems: When and Why Does it Work?
Katharina Schratz (Sorbonne Université Paris, France)	Resonances as a computational tool
Marie-Therese Wolfram (U Warwick, UK)	Large interacting particle systems in the social and data sciences

Plenary Lectures - Mechanics

Łukasz Madej (AGH University of Science and Technology, Poland)	Computational microstructure design: harnessing the synergy of numerical and experimental investigations
Andreas Menzel (TU Dortmund, Germany)	A multiscale perspective on electrical conductivity
Karen Veroy-Grepl (Eindhoven UT, Netherlands)	Physics-Based Model Order Reduction in Digital-Twins: Challenges and Opportunities in the Multi-Scale Material Setting
Utz von Wagner (TU Berlin, Germany)	On Nonlinear Oscillations

Special Lectures

Ludwig Prandtl Memorial Lecture

Cord-Christian Rossow, Institute of Aerodynamics and Flow Technology, Braunschweig, Germany

100 years of Prandtl's Mixing Length: falling short for aerodynamic analysis?

Public Lecture (presented in English)

Andrzej Dragan, Warsaw University, Institute of Theoretical Physics, Warszawa, Poland

Do quantum measurements affect the past?