Scientific Program

Plenary Lectures

1. Anthony T. Patera (Massachusetts)
   Certified Reduced Basis Methods for Parameterized Partial Differential Equations

2. Patrick Anderson (Eindhoven)
   Non-singular Boundary Integral Method for Confined Viscous Flow

3. Zdeněk P. Bažant (Evanston)
   Probabilistic Nano-Mechanical Theory of Quasibrittle Structure Strength, Crack Growth, Lifetime and Fatigue

4. Meinhard Kuna (Freiberg)
   Fracture Mechanics Computations for Piezoelectric and Ferroelectric Materials

5. Andreas Frommer (Wuppertal)
   Matrix Functions: Computation and Applications

6. Peter Gumbsch (Freiburg)
   Progress in Dislocation Based Plasticity

7. Stefan Ulbrich (Darmstadt)
   Multilevel Methods for PDE-constrained Optimization Based on Adaptive Discretizations and Reduced Order Models

8. Carlo Bottasso (Milano)
   Validation and Calibration of Computational Tools for Wind Energy Systems

9. Arjan van der Schaft (Groningen)
   Network Modeling and Control of Multi-physics Systems

10. Andrea Braides (Rome)
    Asymptotic Analysis of Atomistic Systems

Special Lectures

Ludwig Prandtl Memorial Lecture
Alexander Smits (Princeton)
Turbulence at Extreme Raynolds Numbers

Public Lecture
Vladimir Dragović (Belgrade)
Unusual Billiards: Geometry and Mechanics