

Scientific Program

Plenary Lectures

Gregoire Allaire (Ecole Polytechnique Paris)

Looking for the hot spot: homogenization and localization of a convection-diffusion equation in a bounded domain

Olivier Brüls (University of Liège)

Lie group formulations and integration methods in flexible multibody dynamics

Christoph Clanet (Ecole Polytechnique Paris)

Physics of sports

Georg Dolzmann (Universität Regensburg)

Microstructure and effective behavior of materials

Marlis Hochbruck (KIT)

Innovative time integration

Birgit Jacob (Universität Wuppertal)

Infinite-dimensional linear Port-Hamiltonian systems

Heinz Pitsch (RWTH Aachen)

Multi-scale model development for LES of practical combustion applications

Jörg Raisch (TU Berlin)

Optimal control of High-Throughput-Screening (HTS) systems in a dioid algebra

Lev Truskinovsky (Radcliffe Institute for Advanced Study and Ecole Polytechnique Paris)

The critical nature of plastic flow

Andy Wathen (Oxford University)

Preconditioning for PDE-constrained optimization

Special Lectures

**Ludwig Prandtl
Memorial Lecture**

Josef Ballmann (RWTH Aachen)

Aero-Struktur-Dynamik großer Flugzeugtragflügel in schallnaher Strömung

Public Lecture

Thomas Reiter (ESA/ESOC)

Perspektiven für die bemannte Raumfahrt und den Missionsbetrieb in Europa