

## Program

### Day 1

09:00 – 09:15	Welcome and Introduction (H.-J. Bungartz, P. Neumann)
09:15 – 10:15	Round of Introductions (Chair: P. Neumann)
10:15 – 10:45	Coffee break
10:45 – 11:30	Statistical Mechanics and Thermodynamics of Adaptive Molecular Resolution Rafael Delgado-Buscalioni (Chair: J. Reese)
11:30 – 12:00	Hybrid Methods for Particle Suspensions: State of the Art and Current Limitations Jens Harting (Chair: J. Reese)
12:00 – 13:00	Lunch
13:00 – 13:45	Hybrid Modelling Based on Two-Phase Flow Analogy: Advances and Challenges Sergey Karabasov (Chair: G. Biros)
13:45 – 14:15	Water Flow in Nanotubes: An Important Engineering Opportunity and a Testbed for Hybrid Methods Jason Reese (Chair: G. Biros)
14:15 – 14:45	Coffee break
14:45 – 15:30	Mesoscale Methods and Their Applications Dimitris Drikakis (Chair: G. Biros)
15:30 – 17:30	Poster Session and Coffee Break/Snacks

### Day 2

09:00 – 09:45	A Hybrid Model for High Aspect-Ratio Micro/Nano Flows: Transient Problems and On-The-Fly Machine Learning Duncan Lockerby (Chair: J. Harting)
09:45 – 10:30	Adaptive Resolution Simulations: Towards Open Systems Molecular Dynamics Simulations Kurt Kremer (Chair: J. Harting)
10:30 – 11:00	Coffee break
11:00 – 11:30	Molecular-Continuum Coupling Software: Flexibility, Parallelism, Multi-Instance Sampling Philipp Neumann (Chair: J. Harting)
11:30 – 12:30	Plenary Discussion/Exchange (Chair: J. Reese)
12:30 – 13:30	Lunch
13:30 – 14:15	Multi-Material Modeling with Sharp-Interface Methods Nikolaus Adams (Chair: P. Neumann)
14:15 – 14:45	Dirty Tricks for Accelerating Particulate Flow Simulations George Biros (Chair: P. Neumann)
14:45 – 15:00	Closing