

→ Agenda

Community Workshop: Performance Engineering for Numerical Methods in Computational Fluid Dynamics

Thursday, Jun 13, 2024

- 01.00 pm – **Welcome** – Prof. Matthias Müller, RWTH Aachen
- 01.15 pm – **Lessons learned from a performance analysis of an OpenFOAM HPC Grand Challenge** – Marta Garcia Gasulla, Barcelona Supercomputing Center
- 01.55 pm – **Performance modeling for CFD Applications** – Gustavo de Moraes & Alexander Geiß, TU Darmstadt
- 02.30 pm – **Assessing the performance of solvers for kinetic plasma dynamics in a six-dimensional phase-space** – Paul Wilhelm & Fabian Orland, RWTH Aachen
- 03.05 pm – **Coffee break**
- 03.20 pm – **Explaining and controlling turbulent flows through deep learning** – Prof. Ricardo Vinuesa, KTH Stockholm
- 04.20 pm – **Performance and Correctness Analysis of an Exascale Application** – Dr. Joachim Jenke, RWTH Aachen

Friday, Jun 14, 2024

- 01.00 pm – **Welcome** – Prof. Christian Hasse, TU Darmstadt
- 01.05 pm – **Efficient use of computational resources: The Wavelet Adaptive Multi-resolution Method** – Dr. Temistocle Grenga, University of Southampton
- 01.55 pm – **Porting CPU-based/optimized combustion codes to CPU-GPU heterogeneous architectures** – Dr. Daniel Mira Martinez, Barcelona Supercomputing Center
- 02.45 pm – **Coffee break**
- 03.10 pm – **Performance Assessments of the Lattice Boltzmann Solver Musubi** – Dr. Harald Klimach, German Aerospace Center
- 04.00 pm – **Panel Discussion**, hosted by Prof. Christian Hasse, TU Darmstadt