Session Program

Sep 25 - 26, 2024



10th bwHPC Symposium Scientific Presentations

University of Freiburg, Platz der Universität 3 Kollegiengebäude 1 (KG1) HS1010 (25.09.), AULA (26.09) https://uni-freiburg.de/lageplaene/

Wed, September 25

1:50 PM Scientific Presentations: Block 1 **Session** | **Location:** KG1, HS1010 13:50 - 14:10 Theoretical investigations on the catalytic pathway of unspecific peroxygenases in the context of biocatalysis Speaker Hanna-Friederike Poggemann 14:10 - 14:30 Nonequilibrium Phenomena in Many-Body Quantum Systems **Speaker** Samuel Rudge 2:30 PM 3:10 PM Scientific Presentations: Block 2 **Session** | **Location:** KG1, HS1010 15:10 - 15:30 Phenomic Prediction - Optimization of NIRS preprocessing Speaker Vincent Braun 15:30 - 15:50 Finding unbinding pathways in protein ligand systems Speaker Miriam Jäger 15:50 - 16:10 Belle II on NEMO: Flavour and Dark Matter Physics Speaker Matthias Schnepf 16:10 - 16:30 Deepnetworks for reviving and accumulating experimental animal data: From **Matlab to Python** Speaker David Eriksson 4:30 PM 5:00 PM Scientific Presentations: Block 3 **Session** | **Location:** KG1, HS1010 17:00 - 17:20 KI-Morph - User-friendly large-scale image analysis & AI on bwHPC systems **Speaker** Alexander Zeilmann 17:20 - 17:40 New ML-based analysis techniques in fundamental physics Speaker Nathan Huetsch

17:40 - 18:00

Technology of the Hunter System and Porting Strategy towards APU enabled portable engineering codes

Speaker

6:00 PM

Björn Dick

Thu, September 26

9:30 AM

Scientific Presentations: Block 4

Session | Location: KG1, Aula

09:30 - 09:50

Thermographic and Energy Efficiency Analysis of Server Components under Variable Load Conditions

Speakers

Benjamin Ott, Nicola Schuckert

9:50 AM

11:00 AM

Scientific Presentations: Block 5

Session | Location: KG1, Aula

11:00 - 11:20

Considerations on dynamic energy management in HPC systems in connection with the waste heat utilization of the data center

Speaker

Norbert Conrad

11:20 - 11:40

The use of computational chemistry in chemistry: A brief overview with exemplary case studies

Speaker

Ingo Krossing

11:40 - 12:00

High Performance Computing infrastructure for Particle Physics: The Experience of the Karlsruhe groups

Speaker

Sebastian Brommer

12:00 PM