

Session Program

September 24, 2026



12th bwHPC Symposium

Talks

Universität Konstanz, M629
Universitätsstraße 10, 78457 Konstanz

Thu, September 24

10:10 AM

Talks

Session | **Location:** Universität Konstanz, M629, Universitätsstraße 10, 78457 Konstanz

10:10 – 10:25 AM

From light-field data to whole-brain functional ensembles: a GPU- and HPC-accelerated pipeline for larval zebrafish on bwForCluster NEMO2

Speaker

Dr Sophie Aimon

10:25 – 10:40 AM

CMF Fracture Segmentator: ein nnU-Net zur automatisierten Segmentierung von Frakturen des Unterkiefers

Speaker

Johannes Schulze

10:40 – 10:55 AM

Global metagenomic reconstruction of the chicken gut virome reveals 19,778 viral populations and spatial partitioning

Speaker

Timur Yergaliyev

10:55 AM

12:10 PM

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12:10 – 12:25 PM

Signoff Circuit Simulations for Modern Chip-Design using Leading-Edge Design Tools on the bwHPC NEMO2 Cluster

Speaker

Johannes Stark

12:25 PM

1:40 PM

Talks

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1:40 – 1:55 PM

Scaling Extended Genetic and Evolutionary Algorithms on HPC-Systems: Master-Slave versus Island Algorithms

Speaker

Andreas Geyer-Schulz

1:55 – 2:10 PM

Atomistic modelling of structures and processes in electrochemical energy storage and conversion

Speaker

Prof. Axel Groß

2:10 – 2:25 PM

Decoding the “sweet” talk: modeling the glycan code in bacterial infections

2:55 PM

3:30 PM

4:30 PM

Speaker

Olga Makshakova

2:25 – 2:40 PM

Semiclassical Simulations of Dissipative Quantum Matter**Speaker**

Dr Viktoria Noel

2:40 – 2:55 PM

Multi-Scale Modeling of Electrochemical Interfaces and Processes**Speaker**

Timo Jacob

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3:30 – 3:45 PM

Mining Multi-Omics Data for Hidden Mitochondrial Transcripts and Microproteins in Stress-Related Disorders**Speaker**

Sarah Viola Emser

3:45 – 4:00 PM

A standardized workflow for reproducible pig microbiome profiling across laboratories**Speaker**

Samuel Onyilokwu Enokela

4:00 – 4:15 PM

How many zones does an electricity market model need?**Speaker**

Thorsten Weiskopf

4:15 – 4:30 PM

Machine-learned intrinsic coordinates for vibrational calculations**Speaker**

Andrey Yachmenev