

Guest Student  
Colloquium 2018

Monday, 1st October 2018  
Tuesday, 2nd October 2018

Rotunda, 16.4, JSC

Program: see back

**Keynote**

Ingolf Wittmann – IBM

*The Computer That Could Be Smarter Than Us – Cognitive Computing*

## Monday, 1st October 2018

### 9.30 • Opening Remarks & Session I

**Luis Altenkort**

*Optimization of LQCD Kernels on x64 Architectures*

**Justin Loye**

*Lattice Gauge Field Generation on KNL Architecture*

### 10.40 • Coffee Break ☕

### 11.00 • Session II

**Manuel Krage**

*Transport Simulation for Climate Modelling*

**Edilbert Christhuraj**

*Extrapolated Stabilized Explicit Runge-Kutta Methods*

### 12.10 • Lunch 🍴

### 14.00 • Session III

**Michael Innerberger**

*Task-Based Distributed Memory Parallelization of the FMM*

**Morian Sonnet**

*Scalable Electrostatics for a Box Full of Atoms*

### 15.10 • Coffee Break ☕

### 15.30 • Keynote Talk ☆

**Ingolf Wittmann**

Technical Director & Leader of HPC DACH & Europe

*The Computer That Could Be Smarter Than Us - Cognitive Computing*

### 16.40 • Open Discussion 💬

## Tuesday, 2nd October 2018

### 9.30 • Opening Remarks & Session IV

**Aleksandr Boitsov**

*Axion String Simulations*

**David Immel**

*Adaptive Dynamic Load Balancing with Voronoi Cells*

### 10.40 • Coffee Break ☕

### 11.00 • Session V

**Johannes Wasmer**

*Visualization of Hierarchical Performance Data Using Treemaps*

**Petros Anastasiadis**

*Analyzing I/O Behaviour on High Performance Computing Systems*

### 12.10 • Lunch 🍴

### 14.00 • Session VI

**Lucas Kersken**

*Parallel-In-Time Integration with XBraid for an Allen-Cahn-System*

**Felix Huber**

*Efficient Solver for Hines Matrices on GPUs*

### 15.10 • Concluding Remarks