



www.sppexa.de

## SPPEXA Workshop ISC Satellite Event 2013

Wednesday, June 19

9:00 AM – 4:15 PM

Multi-Purpose Area (MPA 4)

CCL – Congress Center Leipzig

- Invited talks by Pete Beckman (Argonne Labs) and Chuck Hansen (U Utah)
- SPPEXA projects report on current findings
- Round-table discussion on the potentials and limits of simulation and HPC with Omar Ghattas (U Austin), Gabriele Gramelsberger (FU Berlin) and Friedel Hoßfeld (JSC)  
Moderated by Patrick Regan (TUM)

SPPEXA provides the environment to enable the participating groups to significantly advance the state of the art in HPC software technology. This workshop is the first SPPEXA event to link SPPEXA members and the program as a whole to the international HPC community.

SPPEXA is DFG's Priority Programme 1648 to address fundamental research on the various aspects of HPC software. It was launched in January 2013 as a strategic initiative of DFG and consists of 13 research consortia involving universities all over Germany as well as international partners.

**ISC'13**  
June 16-20, 2013  
Leipzig, Germany

Image: Boris Lehner für HLRS

# SPPEXA @ ISC 2013

09:00 – 09:15	<b>Welcome Addresses</b>	
09:15 – 10:00	Invited	<b>Pete Beckman</b> ( <i>Argonne National Laboratory</i> ): New Directions for Extreme Scale System Software
10:00 – 10:30	SPPEXA	<b>Christian Lengauer</b> ( <i>University of Passau</i> ): Modern Software Technology for Exascale Computing
10:30 – 11:30	<b>Coffee Break</b>	
11:30 – 12:00	SPPEXA	<b>Felix Wolf</b> ( <i>German Research School of Simulation Sciences</i> ): Using Automated Performance Modeling to Find Scalability Bugs in Complex Codes
12:00 – 12:30	SPPEXA	<b>Oliver Rheinbach</b> ( <i>TU Bergakademie Freiberg</i> ): Local Flops are Free – New Approaches to Nonlinear Domain Decomposition
12:30 – 13:00	SPPEXA	<b>Frank Jenko</b> ( <i>Max Planck Institute of Plasma Physics</i> ): Simulations of Turbulence in Fusion and Astrophysical Plasmas on Peta- to Exascale Platforms
13:00 – 14:15	<b>Lunch Break</b>	
14:15 – 15:00	Invited	<b>Chuck Hansen</b> ( <i>University of Utah</i> ): Big Data: A Scientific Visualization Perspective
15:00 – 16:15	<p><b>The potentials and limits of simulation and HPC</b> A round-table discussion with</p> <p><b>Omar Ghattas</b> (<i>University of Texas at Austin</i>), <b>Gabriele Gramelsberger</b> (<i>Freie Universität Berlin</i>), and <b>Friedel Hoßfeld</b> (<i>Jülich Supercomputing Centre</i>).</p> <p>Moderated by <b>Patrick Regan</b> (<i>Technische Universität München</i>)</p>	