The 21th Workshop on Sustained Simulation Performance
- Technical Program -

February 18th and 19th, 2015
Sendai, Miyagi, Japan

Session Program

Workshop Day 1 (Wed., February 18th, 2015)	
	Registration
10:00-10:30	Opening Session
10:30-12:30	Organizers' Talks
12:30-13:30	Lunch
13:30-14:10	Keynote Session 1
14:10-15:10	Session 1: Future Technologies
15:10-15:30	Coffee Break (in DOCK)
15:30-17:30	Session 2: State-of-the-Art Applications
17:45-19:45	Banquet

Workshop Day 2 (Thu., February 19th, 2015)	
	Registration
10:00-10:40	Keynote Session 2
10:40-10:45	Break
10:45-12:45	Session 3: Toward Highly Efficient Computing
12:45-13:30	Lunch
13:30-16:00	Session 4: Real-world Applications and Systems
16:00-16:10	Closing Session
16:10-16:30	Move to Cyberscience Center
16:30-17:30	A tour around the new supercomputing system in Cyberscience Center

Workshop Day 1 (Wed., February 18th, 2015)

Time	Presentation
	Registration
	Opening Session
10:00-10:05	*Opening Remarks*
	Hiroaki Kobayashi (Tohoku University)
10:05-10:15	*Greetings*
	Hideo Shindo (Tohoku University)
10:15-10:30	*HPC Policy in Japan*
	Yoshio Kawaguchi (Ministry of Education, Culture, Sports, Science and Technology)
	Organizers' Talks
10:30-11:00	*The Impact of Accelerator Technology on HPC*
	Michael Resch (University of Stuttgart)
11:00-11:30	*Tohoku Univ. New Supercomputer System and the Strategy for the Future*
	Hiroaki Kobayashi (Tohoku University)
11:30-12:00	*From Earth Simulator to "Super ICT Platform" in JAMSTEC*
	Makoto Tsukakoshi (JAMSTEC)
12:00-12:30	*NEC Vector Supercomputer – Its Present and Future*
	Shintaro Momose (NEC Corporation)
12:30-13:30	Lunch
	Keynote Session 1
13:30-14:10	*The future of computing is parallel but it may not be easy*
	Michael J. Flynn (Stanford University)
	Session 1: Future Technologies
14:10-14:40	*Green HPC System Design with Innovative Technologies*
	Ryusuke Egawa (Tohoku University)
14:40-15:10	*Energy-efficient Memory Hierarchy toward Future Computing Systems*
	Masayuki Sato (Tohoku University)
15:10-15:30	Coffee Break (in DOCK)
	Session 2: State-of-the-Art Applications
15:30-16:00	*Simulation of Technical Flow Problems and Data Postprocessing on HPC Systems*
	Matthias Meinke (AIA RWTH Aachen)
16:00-16:30	*Arbitrary Geometries for High Order Discontinuous Galerkin Methods*
	Harald Klimach (University of Siegen)
16:30-17:00	*Aerodynamic simulation of flow through porous media based on Lattice Boltzmann Method*
	Jiaxing Qi (University of Siegen)
17:00-17:30	*Application Performance on Next Earth Simulator*
	Hitoshi Uehara (JAMSTEC)
17:45-19:45	Banquet

Workshop Day 2 (Thu., February 19th, 2015)

Time	Presentation
	Registration
	Keynote Session 2
10:00-10:40	*Fifty Years of High Performance Computing — From 1964 to 2014 —* **Yoshio Oyanagi** (Kobe University)
10:40-10:45	Break
	Session 3: Toward Highly Efficient Computing
10:45-11:15	*Enabling Engineering on Exascale* **Sabine Roller** (University of Siegen)
11:15-11:45	*HPCG Performance Improvement on the K computer* **Kazuo Minami** (RIKEN AICS)
11:45-12:15	*What can we do to fight with system diversity?* **Hiroyuki Takizawa** (Tohoku University)
12:15-12:45	*Approximation of the spectral structure of nonlinear operators* **Uwe Kuester** (HLRS)
12:45-13:30	Lunch
	Session 4: Real-world Applications and Systems
13:30-14:00	*High Performance Computing in the Cloud: a survey on performance and usability* **Michael Gienger** (HLRS)
14:00-14:30	*FORTISSIMO - Delivering HPC to SMEs* **Bastian Koller** (HLRS)
14:30-15:00	*Collaborative visualization on supercomputing* **Shinji Shimojo** (Osaka University)
15:00-15:30	*ES2 Application Results and Performance* **Ken'ichi Itakura** (JAMSTEC)
15:30-16:00	*Real-Time Tsunami Analysis for Disaster Prevention and Mitigation* **Akihiro Musa** (Tohoku University)
	Closing Session
16:00-16:10	*Closing Remarks* (JAMSTEC)
16:10-16:30	Move to Cyberscience Center
16:30-17:30	A tour around the new supercomputing system in Cyberscience Center