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**Monday, June 19, 2017**

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■ **Opening Session**

**June 19, 2017, 08:30 am - 09:00 am**

07:30 am - 08:30 am Welcome Coffee

**Panorama 2+3, Forum**

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**Welcome & Introduction**

08:30 am - 08:35 am

Thomas Meuer, ISC Group

Martin Meuer, ISC Group

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**ISC 2017 Program**

08:35 am - 08:45 am

Prof. Dr. Jack Dongarra, University of Tennessee & ORNL

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**Announcement of the Two Finalists of the Hans Meuer Award**

08:45 am - 08:50 am

Dr. Pavan Balaji, ANL

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**GAUSS Award Announcement**

08:50 am - 08:55 am

Prof. Dr. Wolf-Dieter Lukas, BMBF

Prof. Dr.-Ing. Dr. h.c. mult. Michael M. Resch, HLRS

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**ISC Fellowship Awards**

08:55 am - 09:00 am

Martin Meuer, ISC Group

Thomas Meuer, ISC Group

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■ **ISC 2017 Conference Keynote**

**June 19, 2017, 09:00 am - 10:00 am**

10:00 am - 10:30 am Coffee Break

**Panorama 2+3, Forum**

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**Network Science: From the Massive Online Networks to Cancer Genomics**

Dr. Jennifer Tour Chayes, Microsoft Research New England & Microsoft Research New York City

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■ **TOP500**

**June 19, 2017, 10:30 am - 11:30 am**

10:00 am - 10:30 am Coffee Break

11:30 am - 01:00 pm Lunch

**Panorama 2+3, Forum**

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**TOP500 & Green500 Awards**

10:30 am - 10:40 am

Prof. Dr. Jack Dongarra, University of Tennessee & ORNL

Prof. Dr. Wu Feng, Virginia Tech

Martin Meuer, ISC Group

Dr. Erich Strohmaier, LBNL

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**Highlights of the 49th TOP500 List**

10:40 am - 11:10 am

Dr. Erich Strohmaier, LBNL

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**Ten Years of Exascale - Are We There Yet?**

11:10 am - 11:30 am

Prof. Dr. Satoshi Matsuoka, Tokyo Institute of Technology

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**Vendor Showdown 01****June 19, 2017, 01:00 pm - 03:00 pm**

11:30 am - 01:00 pm Lunch

03:00 pm - 04:00 pm Coffee Break

**Panorama 1, Forum****Addison Snell, Intersect360 Research****Dr. Rupak Biswas, NASA Ames Research Center**

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**Introduction**

01:00 pm - 01:05 pm

Dr. Rupak Biswas, NASA Ames Research Center

Addison Snell, Intersect360 Research

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**Intel**

01:05 pm - 01:15 pm

Trish Damkroger, Intel

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**Hewlett Packard Enterprise**

01:15 pm - 01:25 pm

Mike Vildibill, HPE

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**NVIDIA**

01:25 pm - 01:35 pm

Marc Hamilton, NVIDIA

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**Amazon Web Services**

01:35 pm - 01:45 pm

Brendan Bouffler, AWS

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**Huawei**

01:45 pm - 01:55 pm

Francis Lam, Huawei

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**IBM**

01:55 pm - 02:05 pm

Sumit Gupta, IBM

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**Samsung Semiconductor Europe**

02:05 pm - 02:15 pm

Thomas Arenz, Samsung

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**Cavium**

02:15 pm - 02:25 pm

Gopal Hegde, Cavium

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**ExaScaler/PEZY Computing**

02:25 pm - 02:35 pm

Motoaki Saito, ExaScaler/PEZY Computing

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**NEC Deutschland**

02:35 pm - 02:45 pm

Dr. Shintaro Momose, NEC Japan

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**Fujitsu**

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02:45 pm - 02:55 pm

Toshiyuki Shimizu, Fujitsu

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**Voting Results & Awarding**

02:55 pm - 03:00 pm

Dr. Rupak Biswas, NASA Ames Research Center

Addison Snell, Intersect360 Research

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**Vendor Showdown 02****June 19, 2017, 01:00 pm - 03:00 pm**

11:30 am - 01:00 pm Lunch

03:00 pm - 04:00 pm Coffee Break

**Panorama 2, Forum****Dan Olds, GCG****Prof. Dr. Mark Parsons, EPCC**

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**Introduction**

01:00 pm - 01:05 pm

Dan Olds, GCG

Prof. Dr. Mark Parsons, EPCC

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**Supermicro**

01:05 pm - 01:15 pm

Dr. Martin Galle, Supermicro

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**Bull**

01:15 pm - 01:25 pm

Eric Eppe, Atos

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**Cray**

01:25 pm - 01:35 pm

Dr. Steve Scott, Cray

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**Lenovo**

01:35 pm - 01:45 pm

Scott Tease, Lenovo

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**Dell EMC**

01:45 pm - 01:55 pm

Ed Turkel, Dell

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**Seagate**

01:55 pm - 02:05 pm

Dr. Torben Kling-Petersen, Seagate

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**Mellanox**

02:05 pm - 02:15 pm

Gilad Shainer, Mellanox

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**Quantum**

02:15 pm - 02:25 pm

Molly Presley, Quantum

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**DDN Storage**

02:25 pm - 02:35 pm

Dr. James Coomer, DDN Storage

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**HGST, a Western Digital Brand**

02:35 pm - 02:45 pm

Manfred Berger, HGST, a Western Digital Brand

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**NetApp**

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02:45 pm - 02:55 pm

Stan Skelton, Net App

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**Voting Results & Awarding**

02:55 pm - 03:00 pm

Dan Olds, GCG

Prof. Dr. Mark Parsons, EPCC

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■ **PhD Forum**

**June 19, 2017, 01:00 pm - 03:00 pm**

11:30 am - 01:00 pm Lunch

03:00 pm - 04:00 pm Coffee Break

**Panorama 3, Forum**

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**Welcome & Introduction**

01:00 pm - 01:05 pm

Prof. Dr. Bill Gropp, University of Illinois at Urbana-Champaign

Prof. Dr. Gerhard Wellein, RRZE & University of Erlangen-Nuremberg

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**(PhD01) Resource Contention Aware Scheduling of Multiprocessor Tasks on Heterogeneous Platforms**

01:05 pm - 01:09 pm

Robert Dietze, TU Chemnitz

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**(PhD02) Integrated Co-Design of an Exascale Earth Mantle Modeling Framework**

01:09 pm - 01:13 pm

Daniel Drzisga, TU München

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**(PhD03) CRAFT: A Library for Checkpoint/Restart & Automatic Fault Tolerance**

01:13 pm - 01:17 pm

Faisal Shahzad, University of Erlangen-Nuremberg

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**(PhD04) Using Simulations of an Accretion Disk Surrounding a Supermassive Black Hole as a Benchmark for New Numerical Codes in Astrophysics**

01:17 pm - 01:21 pm

Fabian Klein, University of Heidelberg

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**(PhD05) Massively Parallel Evolutionary Placement of Genetic Sequences**

01:21 pm - 01:25 pm

Pierre Barbera, HITS

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**(PhD06) Towards Energy-Efficient Data Reduction Through High-Level I/O Interfaces**

01:25 pm - 01:29 pm

Yevhen Alforov, DKRZ

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**(PhD07) Asynchronous Runtime for AMR Applications on Exascale Systems**

01:29 pm - 01:33 pm

Muhammed Nufail Farooqi, Koç University

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**(PhD08) Improving Energy Efficiency through Vectorization**

01:33 pm - 01:37 pm

Thomas Jakobs, TU Chemnitz

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**(PhD09) Analysis & Modeling of the Energy Consumption of DVFS Processors for Parallel Scientific Computing**

01:37 pm - 01:41 pm

Matthias Stachowski, University of Bayreuth

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**(PhD10) Enhancing Performance of Graphics Processing Units through Better Scheduling of Concurrent Kernels**

01:41 pm - 01:45 pm

Kazem Shekofteh, Ferdowsi University of Mashhad

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**(PhD11) A Novel Heuristic for Data Distribution in Massively Parallel Phylogenetic Inference Using Site Repeats**

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01:45 pm - 01:49 pm

Benoit Morel, HITS

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**(PhD12) Optical Simulation of Nanostructures in Thin-Film Solar Cells**

01:49 pm - 01:53 pm

Julian Hornich, University of Erlangen-Nuremberg

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**(PhD13) Performance Engineering by Means of Automated Performance Modeling**

01:53 pm - 01:57 pm

Julian Hammer, University of Erlangen-Nuremberg

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**PhD Forum Poster Session**

01:57 pm - 02:50 pm

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**ISC 2017 PhD Forum Award Ceremony**

02:50 pm - 03:00 pm

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 **BoF 01**

**June 19, 2017, 01:00 pm - 02:00 pm**

11:30 am - 01:00 pm Lunch

**Kontrast, Hall 3.0**

**Dr. Michael A. Lysaght, ICHEC**

**Dr. David E. Martin, ANL**

**Dr. Simon J. Pennycook, Intel**

**Dr. Thomas Steinke, ZIB**

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 **BoF 02**

**June 19, 2017, 02:00 pm - 03:00 pm**

03:00 pm - 04:00 pm Coffee Break

**Kontrast, Hall 3.0**

**Dr. Pete Beckman, ANL**

**Nicolás Erdödy, Open Parallel**

**Dr. Mario Nemirovsky, BCS**

**François Bodin, IRISA**

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 **Project Posters**

**June 19, 2017, 03:00 pm - 08:30 pm**

03:00 pm - 04:00 pm Coffee Break

**Booth #L-212, Hall 3.0**

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 **Exhibition**

**June 19, 2017, 03:00 pm - 08:30 pm**

03:00 pm - 04:00 pm Coffee Break

**Exhibition Hall, Hall 3.0**

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**Exhibitor Forum 01**

**June 19, 2017, 03:30 pm - 06:10 pm**

03:00 pm - 04:00 pm Coffee Break

**Booth #M-210, Hall 3.0**

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**Bright Computing: Bare Metal (or Virtual) HPC Clusters on Demand**

03:30 pm - 03:50 pm

Martijn de Vries, Bright Computing

Piotr Wachowicz, Bright Computing

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**OpenHPC: From Start to Linux**

03:50 pm - 04:10 pm

Dr. Karl W. Schulz, Intel

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**Fraunhofer Institut SCAI: Fraunhofer SCAIs LAMA Goes Machine Learning**

04:10 pm - 04:30 pm

Dr. Thomas Soddemann, Fraunhofer Institut SCAI

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**SUSE: Transforming Businesses with SUSE HPC**

04:30 pm - 04:50 pm

Jay Kruemcke, SUSE

Jeff Reser, SUSE

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**Red Hat: High Performance Cache Coherent Interconnects**

04:50 pm - 05:10 pm

Jon Masters, Red Hat

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**transtec: Tflops Against Infant Genetic Diseases**

05:10 pm - 05:30 pm

Cyril Baudillon, transtec

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**AMD: AMD's Open Approach to Heterogeneous Compute for HPC & Deep Learning with the Radeon Instinct Initiative**

05:30 pm - 05:50 pm

JC Baratault, AMD

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**PGI: Performance Portability with OpenACC & PGI Compilers**

05:50 pm - 06:10 pm

Doug Miles, PGI

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**Hyperion Research (IDC) Annual Market Update Meeting**

**June 19, 2017, 04:00 pm - 05:00 pm**

03:00 pm - 04:00 pm Coffee Break

**Panorama 1, Forum**

**Kevin Monroe, Hyperion Research**

**Dr. Earl Joseph II, Hyperion Research**

**Bob Sorensen, Hyperion Research**

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■ **Exascale Concepts for Programming Models**

**June 19, 2017, 04:00 pm - 05:00 pm**

03:00 pm - 04:00 pm Coffee Break

**Panorama 2, Forum**

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**ExaGASPI**

04:00 pm - 04:20 pm

Mirko Rahn, Fraunhofer ITWM

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**MPI+X for Exascale**

04:20 pm - 04:40 pm

Prof. Dr. Bill Gropp, University of Illinois at Urbana-Champaign

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**OpenMP - Taking Good Care of the Node in Exascale?**

04:40 pm - 05:00 pm

Dr. Christian Terboven, RWTH Aachen University

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■ **Research Papers 01 (Award Session)**

**June 19, 2017, 04:00 pm - 06:00 pm**

03:00 pm - 04:00 pm Coffee Break

**Panorama 3, Forum**

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**Introduction**

04:00 pm - 04:05 pm

Dr. Pavan Balaji, ANL

Prof. Dr. Jack Dongarra, University of Tennessee & ORNL

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**Hans Meuer Award Finalist 1: An Overview of MPI Characteristics of Exascale Proxy Applications**

04:05 pm - 04:45 pm

Benjamin Klenk, University of Heidelberg

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**Hans Meuer Award Finalist 2: Designing Dynamic & Adaptive MPI Point-to-Point Communication Protocols for Efficient Overlap of Computation & Communication**

04:45 pm - 05:25 pm

Prof. Dr. Dhabaleswar K. Panda, Ohio State University

Dr. Hari Subramoni, Ohio State University

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**Gauss Award Ceremony**

05:25 pm - 05:30 pm

Prof. Dr.-Ing. Dr. h.c. mult. Michael M. Resch, HLRS

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**Gauss Award Winning Paper: Diagnosing Performance Variations in HPC Applications Using Machine Learning**

05:30 pm - 06:00 pm

Emre Ates, Boston University

Ozan Tuncer, Boston University

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■ **BoF 03**

June 19, 2017, 04:00 pm - 05:00 pm

03:00 pm - 04:00 pm Coffee Break

Kontrast, Hall 3.0

Gerald Lotto, Mellanox

Gilad Shainer, Mellanox

Richard Graham, Mellanox

Scott Atchley, ORNL

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■ **Turbulence & Combustion**

June 19, 2017, 05:00 pm - 06:00 pm

Panorama 1, Forum

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**HPC in Applied & Fundamental Combustion Research**

05:00 pm - 05:30 pm

Prof. Dr.-Ing. Andreas Kempf, University Duisburg-Essen

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**Performance of a Compressible Flow Solver on a System with Multi-GPU Nodes**

05:30 pm - 06:00 pm

Richard Pichler, University of Melbourne

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■ **Panel: 65 Years of Compiler Development**

June 19, 2017, 05:00 pm - 06:00 pm

Panorama 2, Forum

Dr. Georg Hager, RRZE

Prof. Dr. Gerhard Wellein, RRZE & University of Erlangen-Nuremberg

Dr. Jan Eitzinger, RRZE

Prof. Louis-Noel Pouchet, Ohio State University

Prof. Dr. Paul Kelly, Imperial College London

Dr.-Ing. Harald Köstler, University of Erlangen-Nuremberg

Prof. Michael Wolfe, NVIDIA/PGI

Prof. Dr. Sebastian Hack, Universität des Saarlandes

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■ **BoF 04**

June 19, 2017, 05:00 pm - 06:00 pm

Kontrast, Hall 3.0

Dr. Happy Sithole, CSIR

Nicolás Erdödy, Open Parallel

Prof. Dr. John Goodacre, University of Manchester

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■ **Intel HPC Special**

June 19, 2017, 06:00 pm - 06:45 pm

Panorama 2, Forum

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**Accelerating Discovery with AI**

Dr. Rajeeb Hazra, Intel

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■ **ISC Welcome Party**

June 19, 2017, 06:30 pm - 08:30 pm

Exhibition Hall, Hall 3.0

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