This is a summary of Los Alamos National Lab (LANL) participation at SC17. In some cases only LANL staff are listed with their event - see SC17 program for a complete list of authors.

Papers

A comparative Study of SDN and Adaptive Routing on Dragonfly Networks
   Thursday, November 16th, 11am-11:30am, Room 402-403-404
   Peyman Faizian, Md Atiqul Mollah, Zhou Tong, Xin Yuan, Michael Lang (LANL)

Charliecloud: Unprivileged Containers for User-Defined Software Stacks in HPC
   Wednesday, November 15th, 2pm-2:30pm, Room 405-406-407
   Reid Priedhorsky, Tim Randles

Control Replication: Compiling Implicit Parallelism to Efficient SPMD with Logical Regions
   Thursday, November 14th 4pm-4:30pm, Room 402-403-404
   Elliott Slaughter, Wonchan Lee, Sean Treichler, Wen Zhang, Michael Bauer, Alex Aiken, Galen Shipman, Patrick McCormick

Experimental and Analytical Study of Xeon Phi Reliability
   Wednesday, November 15th, 10:30am-11am, Room 405-406-407

Optimized Scatter/Gather Data Operations for Parallel Storage
   2nd Joint International Workshop on Parallel Data Storage and Data Intensive Scalable Computing systems
   Latchesar Ionkov, Carlos Maltzhan, Michael Lang

NUMA Distance for Heterogeneous Memory
   Workshop on Memory Centric Programming for HPC
   Sean Williams, Latchesar Ionkov, Michael Lang

A Scalable Analytical Memory Model for CPU Performance Prediction
   Gopinath Chennupati, Nandakishore Santhi, Robert Bird, Sunil Thulasidasan, Stephan Eidenbenz

Software-Defined Storage for Fast Trajectory Queries using a DeltaFS Indexed Mas-
   Qing Zheng, George Amvrosiadis, Saurabh Kadekodi, Garth A. Gibson, Charles D. Cranor, Bradley W. Settlemyer, Gary Grider, Fan Guo

Open Ethernet Drive: Evolution of Energy-Efficient Storage Technology
   The Fourth Workshop on the LLVM Compiler Infrastructure in HPC
   Hsing-bung Chen

OpenMPIR — Implementing OpenMP Tasks with Tapir
   Computational Approaches for Cancer Workshop
   George Stelle, Stephen Olivier, William Moses, Patrick McCormick

Sparse Coding of Pathology Slides
   The Eighth International Workshop on Data-Intensive Computing in the Clouds
   Sanketh Moudgalya, Will Fischer, Garrett Kenyon
Graph Partitioning using Quantum Annealing on the D-Wave System
   2nd International Workshop on Post Moore’s Era Supercomputing (PMES)
   Hayato Ushijima-Mwesigwa, Christian F. A. Negre, Susan M. Mniszewski

Navigating a Maze using a Quantum Annealer
   2nd International Workshop on Post Moore’s Era Supercomputing (PMES)
   Scott Pakin

Markov Chain Modeling for Anomaly Detection in High Performance Computing System Logs
   Fourth Annual Workshop on HPC User Support Tools
   Abida Haque, Alexandra DeLucia, Elisabeth Baseman

Cosmological Particle Data Compression in Practice
   Max Zeyen, James Ahrens, Hans Hagen, Katrin Heitmann, Salman Habib

Workshops

Eighth Annual Workshop for the Energy Efficient HPC Working Group (EE HPC WG)
   Sunday, November 12th, 9am-5:30pm, Room 704-706
   Workshop Co-Organizer: Josip Loncaric

HPC Systems Professionals Workshop
   Monday, November 13th, 9am-5:30pm, Room 603
   Randy Herban, Isaax Traxler, Jenett Tillotson, William Scullin, David Clifton, Alex Younts, Paul Peltz

WOLFHPC: Workshop on Domain-Specific Languages and High-Level Frameworks for High-Performance Computing
   Friday, November 17th, 8:30am-12pm, Room 405
   Program Committee: Patrick McCormick

LLVM-HPC2017: Fourth Workshop on the LLVM Compiler Infrastructure in HPC
   Monday, November 13th, 9am-5:30pm, Room 710
   Program Committee: Patrick McCormick

Tutorials

How To Analyze the Performance of Parallel Codes 101
   Monday, November 13th, 8:30am-5pm, Room 402
   Martin Schulz, James Galarowicz, Donald Maghrak, David Montoya, Jennifer Green

Large Scale Visualization with ParaView
   Sunday, November 12th, 8:30am-5pm
   Kenneth Moreland, W. Alan Scott, David E. DeMarle, Joe Insley, John Patchett, Jon Woodring

Kokkos: Enabling Manycore Performance Portability for C++ Applications and Domain Specific Libraries/Languages
   Monday, November 13th, 1:30pm – 5pm, Room 406
   H. Carter Edwards, Christian Trott, Fernanda Foertter, Geoff Womeldorff

HPC Impact Showcase

Gaining Insights into the Properties of Materials Using Atomistic Simulations on Large-Scale HPC Platforms
   Wednesday, November 15th, 11am-11:30am, Room 503-504
   Danny Perez
Birds of a Feather

Containers in HPC
  Tuesday, November 14th, 5:15pm-7pm
  Richard Canon, Jeffrey Sica, Gregory Kurtzer, Andrew Younge, Abdulrahman Azab, Reid Friedhorsky, Tim Randles

OpenSHMEM in the Era of Exascale
  Wednesday, November 15th, 5:15-7pm, Room 501-502
  Barbara Chapman, Tony Curtis, Oscar Hernandez, Vivek Sarkar, Sameer Shende, Pavel Shamis, Manjunath Venkata, Steve Poole, Jeff Kuehn

OpenStack For HPC: Best Practices for Optimizing Software-defined Infrastructure
  Wednesday, November 15th, 5:15pm-7pm, Room 507
  Blair Bethwaite, Stig Telfer, Martial Michel, Mike Lowe, Robert Budden, Benjamin Lynch, Timothy Randles

State of the Practice: Energy and Power Aware Job Scheduling and Resource Management (EPA-JSRM)
  Wednesday, November 15th, 12:15pm-1:15pm, Room 501-502
  Josip Loncaric, David Montoya

Total Cost of Ownership and HPC System Procurement
  Tuesday, November 14th, 12:15pm-1:15pm, Room 605
  Gert Svensson, Eric Boyer, James Rogers, James Laros, Natalie Bates, Steve Martin, Jason Hick

Usability, Scalability, and Productivity on Many-Core Processors: Intel Xeon Phi
  Tuesday, November 14th, 5:15pm-7pm, Room 603
  Douglas Doerfler, Estela Suarez, Hai Ah Nam

Fabric APIs - libfabric User Perspective and C++ Standardization
  Tuesday, November 14th, 5:15pm-7pm, Room 603
  Jeffrey Squyres, Sean Hefty, Chris Taylor, Howard Pritchard

Posters

Characterization and Comparison of Application Resilience for Serial and Parallel Codes
  Kai Wu, Qiang Guan, Nathan DeBardeleben, Dong Li

Incorporating Proactive Data Rescue into ZFS Disk Recovery for Enhanced Storage Reliability
  Zhi Qiao, Song Fu, Hsing-bung Chen, Michael Lang

PetaVision Neural Simulation Toolbox on Intel KNLs
  Boram Yoon, Pete Schultz, Garrett Kenyon

PORTAGE - A Flexible Conservative Remapping Framework for Modern HPC Architectures

Miscellaneous Events

Dinner with Interesting People
  Wednesday, November 15th, 6pm, Four Seasons Ballroom
  Candace Culhane

SC17 Awards Lunch
  Thursday, November 16th, 12pm, Mile High Room
  Candace Culhane, SIGHPC Emerging Woman Leader Award committee chair
SC17 Planning Committee

Hai Ah Nam, Registration/Store/Merchandise Chair
Christine Sweeney, Mentor-Protégé Program Lead
Jennifer Green, Student Volunteers Committee Member
Charles Garrett, Student Cluster Competition Reproducibility Chair
Hai Ah Nam and Carola Ellinger, Student Cluster Competition Reproducibility Committee Members
Scott Pakin, Technical Papers Committee Member, Architectures & Networks
Christine Sweeney, Posters Committee Member
Candice Culhane, Steering Committee Member and Secretary

SCinet

Ryan Braithwaite, Edge Team Co-Chair
Parks Fields and Dave Modl, Edge Network Team Members
Julie Locke, Fiber Team Member