

Monday, February 5, 2018

8:30 AM-1:30 PM	Registration Henley Concourse, Knoxville Convention Center		
1:30-3:00 PM	Tutorial Track 1 T-12 Room 301E Exascale Debugging and Correctness Testing Tools	Tutorial Track 2 T-8 Ballroom A Container Computing for HPC and Scientific Workflows T-9 Ballroom C ECP Data Analytics & Viz Tools: Alpine & VTK-M T-25 Room 301A Python in HPC T-29 Room 301C Using DOE Math Libraries: Introducing the xSDK	
3:00-3:30 PM	Break		
3:30-5:00 PM	Tutorial Track 1 (continued through 4 PM)	Tutorial Track 2 (continued)	Tutorial Track 3 T-20 Room 300A Introduction to RAJA T-22 Room 300D On-demand Learning for Better Scientific Software: How to Use Resources & Technology to Optimize Your Productivity

Tuesday, February 6, 2018

8:00-8:45 AM	Working Breakfast: ECP Welcome, ECP Leadership Ballroom DEFG	
8:45-9:45 AM	Keynote Address, Gil Weigand Ballroom DEFG	
9:45-10:15 AM	Break	
10:15 AM-12:00 PM	Plenary Session Ballroom DEFG <ul style="list-style-type: none"> HPC Early Science and Readiness Programs Delivering ECP Software 	Tutorial Track 1 T-4 Room 301A Application-driven Fault-Tolerance for High Performance Distributed Computing T-5 Room 301E Asynchronous, Data Effects Programming with DARMA T-15 Room 301C Introduction to ECP Agile Project Management Tools T-17 Lecture Hall Introduction to Machine Learning
12:00-1:30 PM	Working Lunch Ballroom DEFG Better Scientific Software Initiative – Lois Curfman McInnes and Mike Heroux	
1:30-3:00 PM	Poster Session Cumberland Concourse AD/Co-design, HI, Facilities	Tutorial Track 2 T-3 Room 200C Analyzing Memory Performance Using Caliper T-18 Room 200A Introduction to Modern CMake
		Tutorial Track 3 T-28 Ballroom B Using C++ for Scientific Programming T-31 Ballroom C What All Codes Should Do: Overview of Best Practices in HPC Software Development
3:00-3:30 PM	Break	
3:30-4:00 PM	Continuous Integration Plan Ballroom DEFG	Tutorial Track 3 (continued)
4:00-5:30 PM	Breakout Sessions Track 1 B-AD-5 Room 301A An Introduction to Scalable Deep Learning with CANDLE B-ST-10 Room 300C Core-Edge Coupling: An Integrated ECP Demonstration B-AD-18 Room 301E Extreme-Scale Data Transfer: Architectural Framing, Current Practice, and Path to the Future B-HI-21 Ballroom A GPU Accelerated Computing for the Exascale B-ST-23 Room 200E Kokkos Performance Portability Ecosystem B-AD-24 Room 200A Materials and Chemistry (and other small things) Applications B-ST-26 Room 301C MPI and OpenMP B-ST-35 Room 200C The LLVM Compiler Infrastructure in ECP - Usage, Challenges, and Improvements B-HI-NDA-31 Lecture Hall PathForward – Intel (NDA)	
5:30-6:00 PM	Break	
6:00-7:30 PM	Working Dinner Exascale: Out-Compute to Out-Compete Ballroom DEFG Panel of Executives from ECP Industry Council	

Wednesday, February 7, 2018

7:30-8:30 AM	Working Breakfast: Overview of Wednesday Ballroom DEFG	
8:30-10:00 AM	Exascale Systems and Their Precursors (CORAL-2, A21, PF, etc.) Ballroom DEFG	
10:00-10:30 AM	Break	
10:30 AM-12:00 PM	Breakout Sessions Track 1 B-ST-3 Ballroom A Alternative Programming Models in ECP B-AD-17 Room 301C Experience and Requirements for Workflows B-ST-19 Room 301E Fighting Application Amnesia: Tools for Memory Analysis and Characterization of Scientific Applications B-HI-36 Room 200A Understanding the Exascale System through Abstract Machine Models B-AD-2 Ballroom B Algorithmic, Software, and Integration Challenges for Exascale Energy Applications B-FU-6 Room 301A Bridging of Facilities BOF B-AD-7 Room 200C CEED: High-Order Methods and Applications B-HI-NDA-30 Lecture Hall PathForward – IBM (NDA)	Tutorial Track 1 T-2 Room 300A Advanced Use Cases for ECP Agile Project Management Tools T-14 Room 300C Graph and Combinatorial Methods for Enabling Scientific Applications
12:00-1:30 PM	Working Lunch Ballroom DEFG HI Overview (Terri Quinn, Judy Hill, Dave Montoya, Si Hammond, Julia White)	
1:30-3:00 PM	Poster Session Henley Concourse Software Technology	Tutorial Track 2 T-6 Room 200C Charm++: Extreme Scaling with Automatic Load Balancing, Resilience and more T-27 Room 200E Spack 101: Installing and Packaging HPC Software with Spack T-30 Room 200A Using Kokkos
3:00-3:30 PM	Break	
3:30-5:00 PM	Breakout Sessions Track 2 B-ST-1 Ballroom B Addressing Complex Memory for Exascale Systems and Applications B-ST-12 Room 301A Data Management Software Technologies: I/O Interfaces and Data Services B-AD-20 Room 300D FOM and ST Integration for Earth and Space Science Applications B-ST-25 Room 301C Mixed Model Programming B-AD-34 Room 301E The CODAR Software Stack B-HI-38 Ballroom C Using KNL to Prepare for Exascale: Experience on Cori and Theta B-ST-39 Ballroom A Using the Flang/LLVM Compiler for ECP Applications and Tools Development B-HI-NDA-29 Lecture Hall PathForward – HPE (NDA)	Tutorial Track 2 (continued)
5:00-6:30 PM	Reception in lieu of dinner – Open Poster Session Columbia and Henley Concourses	

Thursday, February 8, 2018

7:30-8:30 AM	Working Breakfast: Overview of Thursday Ballroom DEFG			
8:30-10:00 AM	Focus Area Meetings AD Ballroom A • ST Ballroom C • HI Ballroom B			
10:00-10:30 AM	Break			
10:30 AM-12:00 PM	Breakout Sessions Track 1 B-ST-8 Ballroom A Checkpoint/Restart, Compression and Workflow B-HI-9 Ballroom B Continuous Integration Testing for ECP: An Essential Software Development Tool B-AD-11 Ballroom C Data Analytics and Optimization Applications B-ST-16 Room 301A Exascale Debugging and Correctness B-HI-22 Room 301C Hardware Evaluation – Analysis and Predictive Capability for Exascale B-AD-37 Room 301E Urban Coupled Simulations B-HI-NDA-32 Lecture Hall PathForward – NVIDIA (NDA)		Tutorial Track 1 T-16 Room 200A Introduction to Legion and Regent T-21 Room 200C Introduction to the NVIDIA Visual Profiler T-26 Room 200E RAPL, GEOPM and the Future of Power Management and Control	
12:00-1:30 PM	Working Lunch Ballroom DEFG OSTI Software Center – Jay Billings			
1:30-3:00 PM	Unstructured Time Informal / impromptu meetings	Breakout Sessions Track 2 B-HI-NDA-28 Lecture Hall PathForward – Cray (NDA)	Tutorial Track 2 T-19 Room 300D Introduction to ParSEC	Tutorial Track 3 T-24 Room 200A Performance Tuning of Scientific Codes with the Roofline Model T-7 Room 200C Compression for Scientific Data T-10 Room 200E ECP Data Management Tools: ADIOS, HDF5, and DataLib
3:00-3:30 PM	Break			
3:30-5:00 PM	Breakout Sessions Track 3 B-AD-15 Ballroom C Everything You Always Wanted to Know About Proxy Apps but Were Afraid to Ask B-HI-14 Room 301A Enhancing Productivity and Innovation in ECP with a Team of Teams Approach B-ST-4 Room 300A An Exascale Fortran Interface to Trilinos B-ST-13 Room 301C ECP Analysis and Visualization Mini Symposium B-ST-33 Room 301E Spack State of the Union B-HI-NDA-27 Lecture Hall PathForward – AMD (NDA)		Tutorial Track 3 (continued)	
5:00-6:00 PM	Adjourn Formal Meeting Ballroom DEFG Closing Comments from ECP Director and L2 Leads			

Friday, February 9, 2018

8:30-10:00 AM Tutorial Track 1

T-1 | **Room 300A** | Accelerating Linear Algebra with MAGMA

T-11 | **Room 301A** | Exascale Code Optimization Tools

T-13 | **Room 301C** | Git It Together – Using Version Control for Scientific Collaboration

T-23 | **Room 301E** | Optimizing OpenMP in Hybrid Codes