

Monday, January 14, 2019

8:00 AM-5:30 PM	Registration Desk Legends Pre-function Area				
9:00-10:30 AM	NDA Session Legends Ballroom PathForward Vendor Presentation – Cray	Tutorial Track 1 Founders I CANDLE Tutorial Founders II Exascale I/O Technologies Founders III PDEs, optimization, and eigenproblems with PETSc/TAO and SLEPc Founders IV Spack Tutorial	Tutorial Track 2 Champions I & II An Introduction to BEE Containerized Application Workflows Champions III Better Scientific Software Champions V Modern CMake tutorial		
10:30-11:00 AM	Break Legends Pre-function Area				
11:00 AM-12:30 PM	NDA Session Legends Ballroom PathForward Vendor Presentation – IBM	Tutorial Track 1 (Continued)	Tutorial Track 2 (Continued)		
12:30-2:00 PM	Lunch (On Your Own)				
2:00-3:30 PM	NDA Session Legends Ballroom PathForward Vendor Presentation – HPE	Tutorial Track 1 (Continued)		Tutorial Track 4 Champions V Container Computing for HPC and Scientific Workloads	ECP 101 Champions III
3:30-4:00 PM	Break Legends Pre-function Area				
4:00-4:30 PM	NDA Session Legends Ballroom PathForward Vendor Presentation – Intel	Tutorial Track 1 (Continued)		Tutorial Track 4 (Continued)	
4:30-5:30 PM			Tutorial Track 3 Champions I & II UnifyCR – A file system for burst buffers		
5:30-6:30 PM					

Tuesday, January 15, 2019

7:00 AM-6:00 PM	Registration Desk Legends Pre-function Area					
7:30-8:45 AM	Working Breakfast: ECP Welcome, ECP Leadership Legends Ballroom					
8:45-9:45 AM	Keynote Address: "State of the ECP" by Doug Kothe and the ECP Leadership Team Legends Ballroom					
9:45-10:15 AM	Break Legends Pre-function Area					
10:15 AM-12:00 PM	Focus Area Meetings AD Founders Ballroom • ST Legends Ballroom • HI Champions III					
12:00-1:30 PM	Working Lunch Legends Ballroom Plenary – Facilities update BSSw Fellows Announcement					
1:15-2:45 PM	Poster Session – Application Development / Hardware & Integration / Facilities / Industry Discovery Center					
2:30-3:00 PM	Break Legends Pre-function Area					
3:00-4:00 PM	NDA Session Legends Ballroom PathForward Vendor Presentation Cray (Repeat)	Tutorial Track 1 (Sheraton) Greenbrier Salon A An introduction to the xSDK, a community of diverse numerical HPC software packages	Breakout Sessions Track 1 Champions I & II Making Agile Work for Your R&D Software Project	Breakout Sessions Track 2 Champions V OpenMP BoF at ECP	Breakout Sessions Track 3 Founders I & II Implications of Exascale Hardware Trends on Application Development Champions III ECP Continuous Integration Framework – getting started	Breakout Sessions Track 4 Founders III & IV Checkpointing from Application Perspective: Use Cases, Software Integration, Challenges
4:00-5:00 PM		(Sheraton) Greenbrier Salon B Atlassian Confluence Fundamentals (Beginners to Intermediate)				(Sheraton) Greenbrier Salon C Introduction to the Capabilities and Use of the SUNDIALS suite of Nonlinear and Differential/Algebraic Equation Solvers

Wednesday, January 16, 2019

7:00 AM-5:30 PM	Registration Desk Legends Pre-function Area		
7:30-8:30 AM	Working Breakfast: Overview of Wednesday Legends Ballroom		
8:30-10:00 AM	NDA Session (Sheraton) Greenbrier Ballroom PathForward Vendor Presentation AMD	Tutorial Track 1 Founders III Application-driven Fault-Tolerance for High Performance Distributed Computing Founders IV Flux: Using Next-Generation Resource Management and Scheduling Infrastructure for Exascale Workflows Champions I & II Performance Tuning with the Roofline Model on GPUs and CPUs Champions III Deep Learning at Scale Champions V OpenMP 4.5 and 5.0	Breakout Sessions Track 1 Founders I Lossy data reduction/compression for simulations and experiments Founders II The LLVM Compiler Infrastructure in ECP – Usage, Updates, Challenges, and Improvements Champions VI From Good to Great: Getting Started with PSIP (Productivity Sustainability Improvement Planning) Champions VII Towards enabling applications to exploit SmartNIC/FPGA with integrated networking and acceleration
10:00-10:30 AM	Break		
10:30 AM-12:00 PM	NDA Session Legends Ballroom PathForward Vendor Presentation NVIDIA	Tutorial Track 1 (Continued)	Breakout Sessions Track 1 Founders I & II Kokkos EcoSystem 3.0 Roadmap Champions VI & VII Using the Flang/LLVM compiler for ECP Applications and Tools Development (Sheraton) Greenbrier Salon A Architectural Challenges of Genomic Analysis (Sheraton) Greenbrier Salon B & C Jupyter at HPC Centers
12:00-1:30 PM	Working Lunch Legends Ballroom Plenary – Continuous Integration		

1:15-2:45 PM	Poster Session – Software Technology Discovery Center				
2:30-3:00 PM	Break Legends Pre-function Area				
3:00-4:00 PM	NDA Session 1 Legends Ballroom PathForward Vendor Presentation IBM (Repeat)	NDA Session 2 (Sheraton) Greenbrier Ballroom Cray Performance Tools Deep Dive	Tutorial Track 1 Founders I Atlassian Jira Fundamentals (Beginners to Intermediate) Founders II A Tutorial Introduction to RAJA Founders III Graph and Combinatorial Methods for Enabling Scientific Applications Founders IV Task-Based Parallel Programming in Legion	Breakout Sessions Track 1 Champions I & II AMReX and AMReX-based Applications Champions VI & VII Fostering a culture of passion and productivity in ECP teams	Breakout Sessions Track 2 Champions III Preparing Applications for the Argonne Aurora 2021 System Champions V MPI Breakout
4:00-5:00 PM					Champions III Preparing Applications for NERSC-9 (Perlmutter) as an Exascale Waypoint Champions V Spack Roundtable (Sheraton) Greenbrier Ballroom Software Sustainability for ECP and Beyond

Thursday, January 17, 2019

7:00 AM-6:00 PM	Registration Desk Legends Pre-function Area			
7:30-8:30 AM	Working Breakfast: Overview of Thursday Legends Ballroom			
8:30-10:00 AM	NDA Session 1 Founders I & II PathForward Vendor Presentation HPE (Repeat)	NDA Session 2 (Sheraton) Greenbrier Ballroom NVBit: A Binary Instrumentation Tool for CUDA	Tutorial Track 1 Champions I Advanced Programming on Hybrid Computers in PaRSEC Using Symbolic Representation Champions II Boosting power efficiency of HPC applications with GEOPM Champions VI (*) Contemporary Peer Code Review in Scientific Software Development (Part I) Champions VII (*) In Situ Visualization and Analysis with Ascent (Part I)	Breakout Sessions Track 1 Founders III CEED: High-Order Methods and Applications Founders IV System-level architecture simulation for exascale: challenges and opportunities Champions III Management of Complex, Heterogeneous & Hierarchical Memory Resources Champions V Toward Common and Interoperable Software Infrastructures
10:00-10:30 AM	Break Legends Pre-function Area			
10:30 AM-12:00 PM	NDA Session 1 Legends Ballroom PathForward Vendor Presentation Intel (Repeat)	NDA Session 2 (Continued)	Tutorial Track 1 (Continued) (*) Room changes Champions V Contemporary Peer Code Review in Scientific Software Development (Part II) Champions VI & VII In Situ Visualization and Analysis with Ascent (Part II)	Breakout Sessions Track 2 Founders I & II Kokkos Applications: Lessons Learned Founders III & IV Performance Portability at the Intersection of the Exascale Computing Project and the DOE Centers of Excellence Champions III Lessons Learned from National Security Applications
12:00-1:30 PM	Working Lunch Legends Ballroom Plenary – Exascale Deep Learning			

<p>1:30-3:00 PM</p>	<p>NDA Session 1 (Sheraton) Greenbrier Ballroom PathForward Vendor Presentation AMD (Repeat)</p>		<p>Tutorial Track 2 Champions III SLATE and MAGMA: linear algebra for HPC Champions V Kokkos Short Tutorial Champions VI & VII TAU Performance System</p>	<p>Breakout Sessions Track 2 Founders III Modeling the Coupling of Climate, Urban Microclimate, and the Built Environment Founders IV Supporting Complex Workflows from Experimental and Observational Facilities Champions I & II Online Data Analysis and Reduction Software</p>	<p>Breakout Sessions Track 4 Founders I & II Portable, High-Performance C++ Programming Models for Heterogeneous Architectures</p>
<p>3:00-3:30 PM Break Legends Pre-function Area</p>					
<p>3:30-4:30 PM</p>	<p>NDA Session 1 (Sheraton) Greenbrier Ballroom PathForward Vendor Presentation NVIDIA (Repeat)</p>	<p>NDA Session 2 Legends Ballroom Demonstrating new hardware capabilities with ECP applications IBM</p>	<p>Tutorial Track 3 Founder III & IV Umpire: Managing Heterogeneous Memory Resources Champions III Introduction to the Global Arrays Toolkit</p>	<p>Breakout Sessions Track 3 Founders I & II Containers in HPC Champions I & II Software Assurance and HPC Champions V Resource Management and Scheduling Challenges at Exascale</p>	
<p>4:30-5:00 PM Adjourn Formal Meeting Legends Ballroom Closing Comments from ECP Director and L2 Leads</p>					