



NERVE CENTER SCHEDULE: DAY ONE

Join Intel at SC17 | Intel Booth #1301

Current schedule - 11.9.17
Subject to change.

MONDAY, NOVEMBER 13, 2017

TIME	LOCATON	TOPICS	SESSION / PRESENTATION	PRESENTER(S)	REMINDER LINK
7:00 P.M.	Exhibits Open				
7:15 - 7:30 P.M.	Presentation Theater	Artificial Intelligence	Data-Driven Scientific Discoveries on the ALCF Theta Supercomputing System	Venkatram Vishwanath, Argonne National Labs	Save to Calendar
7:15 - 8:00 P.M.		Code Modernization/ Software Development	Using Roofline Analysis for Performance Tuning	James Tullos, Intel	Save to Calendar
		Architecture - Hardware & Software & Systems	Intel® Artificial Intelligence Platforms	Steven Stein, Intel	Save to Calendar
		Accelerators	Accelerators Community - Technical Discussions, Demos & Topics		Save to Calendar
		Artificial Intelligence	Data-Driven Scientific discoveries on the ALCF Theta Supercomputing system	Venkatram Vishwanath, Argonne National Labs	Save to Calendar
7:45 - 8:00 P.M.	Presentation Theater	Code Modernization/ Software Development	NERSC evolutionary approach to Intel® Xeon Phi™ optimization using Roofline Analysis	Jack Deslippe, NERSC	Save to Calendar
8:00 - 8:15 P.M.	Presentation Theater	Architecture - Hardware & Software & Systems	Early Results on the Argonne Intel® Xeon Phi™ Cray XC-40 System Theta	Scott Parker, Argonne National Labs	Save to Calendar
8:00 - 9:00 P.M.		Code Modernization/ Software Development	Using Roofline Analysis for Performance Tuning	James Tullos, Intel	Save to Calendar
		Architecture - Hardware & Software & System	Early Results on the Argonne Intel® Xeon Phi™ Cray XC-40 System Theta	Scott Parker, Argonne National Labs	Save to Calendar
		Accelerators	Accelerators Community - Technical Discussions, Topics & Demos		Save to Calendar
		Artificial Intelligence	An Ultra-Low Latency, TeraOps/s Reconfigurable Inference Processor for Real-Time Multi-Layer Perceptrons	Ahmed Sanaullah, Boston University	Save to Calendar
9:00 P.M.	Closed				



NERVE CENTER SCHEDULE: DAY TWO

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TUESDAY, NOVEMBER 14, 2017

TIME	LOCATON	TOPICS	SESSION / PRESENTATION	PRESENTER(S)	REMINDER LINK
10:00 A.M.	Exhibits Open				
10:15 - 10:30 A.M.	Presentation Theater	Code Modernization/ Software Development	Performance of Ansys Fluent on latest Intel Hardware	Pavan Mutnuri, Ansys	Save to Calendar
10:15 - 11:00 A.M.		Code Modernization/ Software Development	Performance of Ansys Fluent on latest Intel Hardware	Pavan Mutnuri, Ansys	Save to Calendar
		Accelerators	An Integrated High-Performance Solution for Genomic Analysis High throughput and efficiency via FPGA acceleration	Jim Wu, Falcon Computing	Save to Calendar
		Fabric / Interconnect	What's new with Intel® Omni-Path Architecture	Susan Bobholz, Intel	Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Demos & Topics		Save to Calendar
11:00 - 11:15 A.M.	Presentation Theater	Artificial Intelligence	A Deep Learning tool for fast simulation	Sofia Vallecorsa, CERN	Save to Calendar
11:00 - 12:00 P.M.		Code Modernization/ Software Development	Performance Tuning for the Intel® Xeon® Scalable Processors	James Tullos, Intel	Save to Calendar
		Accelerators	Hyperfast Streaming & Searches in Relational Databases	Dr. Karsten Roenner, Swarm64	Save to Calendar
		Fabric / Interconnect	What's new with Intel® Omni-Path Architecture	Susan Bobholz, Intel	Save to Calendar
		Artificial Intelligence	A Deep Learning tool for fast simulation	Sofia Vallecorsa, CERN	Save to Calendar
12:00 - 1:00 P.M.	Presentation Theater	Panel Discussion: Programming and Computing	Driving 20 Years of HPC Programming: Past, Present, and Future of OpenMP. Moderator: Michael Klemm, Intel	Dmitry Durnov, Michael Chuvelev, Sean Hefty, Jim Cownie, Maria Garzaran, Xinmin Tian, Rakesh Keishnaiyer, Intel	Save to Calendar
			25 Years of MPI Enabling Cluster Computing Moderator: Hans-Christian Hoppe, Intel		Save to Calendar
12:00 - 1:00 P.M.		Architecture - Hardware & Software & System	Matching Pursuit scalability on large Intel® Xeon Phi™ based clusters	Luis Paulo Santos, University do Minho, Portugal	Save to Calendar
		Storage / NVMe	Where Intel® Optane™ Memory fits in HPC	Cyndi Peach, Intel Andrey Kudryavtsev, Intel	Save to Calendar
		Artificial Intelligence	Accelerated Characterization of Neural Circuits of the Brain	Simon Warfield, Boston Children's Hospital	Save to Calendar
1:00 - 1:15 P.M.	Presentation Theater	Storage / NVMe	Benefits of Intel® Memory Drive Technology for scientific applications (Intel/Argonne National Labs/Moscow State Univ.)	Andrey Kudryavtsev, Intel Yuri Alexeev, ANL Vladimir Mironov, MSU	Save to Calendar
1:00 - 2:00 P.M.		Code Modernization/ Software Development	Accelerating Cryo-EM Reconstruction in RELION with x86 SIMD Instructions	Erik Lindahl, Stockholm University	Save to Calendar
		Architecture - Hardware & Software & System	Optimizing ADCIRC: Lessons learned in trying to optimize an unstructured grid code for the MIC architecture	Paulius Velesko, Oklahoma State Univ.	Save to Calendar
		Storage / NVMe	Benefits of Intel® Memory Drive Technology for scientific applications (Intel/ANL/Moscow State Univ.)	Andrey Kudryavtsev, Intel Yuri Alexeev, ANL Vladimir Mironov, MSU	Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Demos & Topics		Save to Calendar



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TUESDAY, NOVEMBER 14, 2017

TIME	LOCATON	TOPICS	SESSION / PRESENTATION	PRESENTER(S)	REMINDER LINK
2:00 - 2:45 P.M.	Presentation Theater	Panel Discussion: Intel® Omni-Path Architecture	How real science benefits from Intel® Omni-Path Architecture	Susan Bobholz, Intel	Save to Calendar
2:00 - 3:00 P.M.		Visualization	OSPRay – Leading the way in interactive visual analysis at scale	Jefferson Amstutz, Intel	Save to Calendar
		Accelerators	Intel HLS Tool for FPGA with Gidel Board	Ofer Pravda, Gidel	Save to Calendar
		Code Modernization/ Software Development	Intel® VTune™ Amplifier's Application Performance Snapshot – profiler at scale in action!	Dmitry Prohorov, Intel	Save to Calendar
		Fabric / Interconnect	Fabric / Interconnect Community - Technical Discussions, Topics & Demos		Save to Calendar
3:00 - 3:15 P.M.	Presentation Theater	Visualization	Interactive In Situ Visualization of LAMMPS simulations with OSPRay (Argonne National Labs)	Silvio Rizzi, ANL Will Usher, ANL Joe Insley, ANL	Save to Calendar
3:00 - 4:00 P.M.		Visualization	Interactive In Situ Visualization of LAMMPS simulations with OSPRay (Argonne National Labs)	Silvio Rizzi, ANL Will Usher, ANL Joe Insley, ANL	Save to Calendar
		Accelerators	Dynamic loading of multiple FPGA accelerator images in a Cloud environment	Jean-Baptiste Leclere, Accelize	Save to Calendar
		Code Modernization/ Software Development	Intel® VTune™ Amplifier's Application Performance Snapshot – profiler at scale in action!	Dmitry Prohorov, Intel	Save to Calendar
		Fabric / Interconnect	Fabric / Interconnect Community - Technical Discussions, Topics & Demos		Save to Calendar
4:00 - 4:15 P.M.	Presentation Theater	Architecture	Performance of PGAS Models on Intel® Xeon Phi™: A Comprehensive Study with MVAPICH2-X	Dhableswar K. Panda, Ohio State Univ.	Save to Calendar
4:00 - 5:00 P.M.		Code Modernization/ Software Development	Intel® Parallel Studio XE 2018 & Intel MPI Library 2019 Technical Preview	James Tullos, Intel	Save to Calendar
		Architecture - Hardware & Software & System	Performance of PGAS Models on Intel® Xeon Phi™: A Comprehensive Study with MVAPICH2-X	Dhableswar K. Panda, Ohio State Univ.	Save to Calendar
		Community	Diversity Panel / Open Community Time		Save to Calendar
5:00 - 5:15 P.M.	Presentation Theater	Code Modernization/ Software Development	Open Community Time		Save to Calendar
5:00 - 6:00 P.M.		Code Modernization/ Software Development	Code modernization applied to an industry-oriented CFD solver	Nicolas Alferez, Onera	Save to Calendar
		Architecture - Hardware & Software & System	SIMD Extensions and Best Performance Tuning Practices for Intel® Xeon® Scalable Processors	Xinmin Tian, Intel	Save to Calendar
		Community	Diversity Panel / Open Community Time		Save to Calendar
6:00 P.M.	Closed				



NERVE CENTER SCHEDULE: DAY THREE

Join Intel at SC17 | Intel Booth #1301

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WEDNESDAY, NOVEMBER 15, 2017

TIME	LOCATON	TOPICS	SESSION / PRESENTATION	PRESENTER(S)	REMINDER LINK
10:00 A.M.	Exhibits Open				
10:15 - 10:30 A.M.	Presentation Theater	Artificial Intelligence	CAPES: Computer Automated Performance Enhancement System	Oceane Bel, Kenneth Chang, UC Santa Cruz	Save to Calendar
10:15 - 11 A.M.		Artificial Intelligence	CAPES: Computer Automated Performance Enhancement System	Oceane Bel, Kenneth Chang, UC Santa Cruz	Save to Calendar
		Visualization	Software-Defined In-Situ Visualization with KNL on Stampede-2	Paul Navratil, TACC	Save to Calendar
		Architecture - Hardware & Software & System	Adapting Hartree Centre codes to leverage Scafell Pike	Sergi Siso, Hartree Centre	Save to Calendar
		Storage / NVMe	NVMeOF using OPA SPDK	Cyndi Peach, Intel Andrey Kudryavtsev, Intel	Save to Calendar
11:00 - 11:15 A.M.	Presentation Theater	Architecture - Hardware & Software & System	Optimizing Climate and Weather Applications for Intel® Xeon® and Intel® Xeon Phi™ Processors	Dr. Richard D. Loft, NCAR	Save to Calendar
11:00 - 12:00 P.M.		Artificial Intelligence	AI Community - Technical Discussions, Demos & Topics		Save to Calendar
		Visualization	Visualization Community - Technical Discussions, Topics & Demos		Save to Calendar
		Architecture - Hardware & Software & System	Optimizing Climate and Weather Applications for Intel® Xeon® and Intel® Xeon Phi™ Processors	Dr. Richard D. Loft, NCAR	Save to Calendar
		Storage / NVMe	NVMeOF using OPA SPDK	Cyndi Peach, Intel Andrey Kudryavtsev, Intel	Save to Calendar
12:00 - 12:15 P.M.	Presentation Theater	Accelerators	Achieving the World's Fastest Spark with Intel FPGAs and Bigstream	Roop Ganguly, Bigstream	Save to Calendar
12:00 - 1:00 P.M.		Code Modernization/ Software Development	Performance optimization of the Smoothed Particle Hydrodynamics code Gadget3 on second generation Intel® Xeon Phi™	Luigi Iapichino, LRZ	Save to Calendar
		Architecture - Hardware & Software & System	Extending OpenHPC to cloud environments with OpenStack	Jeff Adams, Intel	Save to Calendar
		Accelerators	Achieving the World's Fastest Spark with Intel FPGAs and Bigstream	Roop Ganguly, Bigstream	Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Demos & Topics		Save to Calendar
1:00 - 1:15 P.M.	Presentation Theater	Architecture	Scalable Deep Learning with BigDL on Urika-XC	Alex Heye, Cray	Save to Calendar
1:00 - 2:00 P.M.		Code Modernization/ Software Development	Inspect the data flow of an Autonomous Driving case study with Intel Advisor's Flow Graph Analyzer	Pablo Reble, Intel	Save to Calendar
		Architecture - Hardware & Software & System	Scalable Deep Learning with BigDL on Urika-XC	Alex Heye, Cray	Save to Calendar
		Accelerators	Datacenter Acceleration with BittWare Boards and Intel FPGAs	Ron Huizen, BittWare	Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Demos & Topics		Save to Calendar



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TIME	LOCATON	TOPICS	SESSION / PRESENTATION	PRESENTER(S)	REMINDER LINK
2:00 - 2:45 P.M.	Presentation Theater	Panel Discussion: Storage	Evolution of Data Transfer in HPC scientific research (Caltech, SuperMicro, Zettar, Intel)	Cyndi Peach, Intel Andrey Kudryavtsev, Intel	Save to Calendar
2:00 - 3:00 P.M.		Storage / NVMe	Evolution of Data Transfer in HPC scientific research (Caltech, SuperMicro, Zettar, Intel)	Cyndi Peach, Intel Andrey Kudryavtsev, Intel	Save to Calendar
		Code Modernization/ Software Development	SWIFT: Task-Based Parallelism	James Willis, Durham Univ.	Save to Calendar
		Fabric / Interconnect	Superb QCD performance on OPA using multiple endpoints	Larry Meadows, Intel	Save to Calendar
		Artificial Intelligence	Fast Microscopy Image Reconstruction Using Multilayer CNNs and Autoencoders: Opportunities & Challenges (Novartis)	Kushal Datta, Intel, Kyle Ambert, Intel, Kristina Kermanshahch, Intel	Save to Calendar
3:00 - 3:15 P.M.	Presentation Theater	Code Modernization/ Software Development	An efficient MPI/OpenMP parallelization of the Hartree-Fock method for the second generation of Intel® Xeon Phi™	Yuri Alexeev, Argonne National Labs	Save to Calendar
3:00 - 4:00 P.M.		Storage / NVMe	High Performance IO & Storage Architecture	Peter Jones, Intel, Andreas Dilger, Intel	Save to Calendar
		Code Modernization/ Software Development	An efficient MPI/OpenMP parallelization of the Hartree-Fock method for the second generation of Intel® Xeon Phi™	Yuri Alexeev, Argonne National Labs	Save to Calendar
		Fabric / Interconnect	Fabric / Interconnect Community - Technical Discussions, Topics & Demos		Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Demos & Topics		Save to Calendar
4:00 - 4:15 P.M.	Presentation Theater	Architecture - Hardware & Software & System	Living Heart Model simulation using Hybrid HPC	Wolfgang Gentzsch, UberCloud	Save to Calendar
4:00 - 5:00 P.M.		Accelerators	Accelerators Community - Technical Discussions, Topics & Demos		Save to Calendar
		Architecture - Hardware & Software & System	Living Heart Model simulation using Hybrid HPC	Wolfgang Gentzsch, UberCloud	Save to Calendar
		Community	Code Modernization	Russ Beutler, Intel	Save to Calendar
5:00 - 5:15 P.M.	Presentation Theater	Architecture - Hardware & Software & System	Open Community		Save to Calendar
5:00 - 6:00 P.M.		Accelerators	Accelerators Community - Technical Discussions, Topics & Demos		Save to Calendar
		Architecture - Hardware & Software & System	FEA simulation made affordable via Altair's HyperWorks Unlimited Appliance	Rob Walsh, Altair	Save to Calendar
		Community	Code Modernization	Russ Beutler, Intel	Save to Calendar
6:00 P.M.	Closed				



NERVE CENTER SCHEDULE: DAY FOUR

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Current schedule - 11.9.17
Subject to change.

THURSDAY, NOVEMBER 16, 2017

TIME	LOCATON	TOPICS	SESSION / PRESENTATION	PRESENTER(S)	REMINDER LINK
10:00 A.M.	Exhibits Open				
10:15 - 10:30 A.M.	Presentation Theater	FPGA	Real-time Analytics & Scale-out Machine Learning with FPGA Key-Value Store	John Lockwood, AlgoLogic	Save to Calendar
10:15 - 11:00 A.M.		Code Modernization/ Software Development	Intel MPI Library 2019 Technical Demo	James Tullos, Intel	Save to Calendar
		Visualization	Visualization Community - Technical Discussions, Topics & Demos		Save to Calendar
		Accelerators	Real-time Analytics & Scale-out Machine Learning with FPGA Key-Value Store	John Lockwood, AlgoLogic	Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Topics & Demos		Save to Calendar
11:00 - 11:15 AM	Presentation Theater	Code Modernization/ Software Development	How to get started with Machine Learning and Deep Learning; What they don't tell you and what to expect	Armando Acosta, Dell	Save to Calendar
11:00 - 12:00 P.M.			How to get started with Machine Learning and Deep Learning; What they don't tell you and what to expect	Armando Acosta, Dell	Save to Calendar
		Visualization	Visualization Community - Technical Discussions, Topics & Demos		Save to Calendar
		Accelerators	Accelerators Community - Technical Discussions, Topics & Demos		Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Topics & Demos		Save to Calendar
12:00 - 12:15 P.M.	Presentation Theater	Code Modernization/ Software Development	Profiling inside containers with Intel® VTune™ Amplifier XE	Dmitry Prohorov, Intel	Save to Calendar
12:00 - 1:00 P.M.			Profiling inside containers with Intel® VTune™ Amplifier XE	Dmitry Prohorov, Intel	Save to Calendar
		Storage / NVMe	Ruler SSDs	Cyndi Peach, Intel Andrey Kudryavtsev, Intel	Save to Calendar
		Fabric / Interconnect	What's new with Intel® Omni-Path Architecture	Susan Bobholz, Intel	Save to Calendar
		Artificial Intelligence	AI Community - Technical Discussions, Topics & Demos		Save to Calendar
1:00 - 1:15 P.M.	Presentation Theater	Code Modernization/ Software Development	Generic parallelization of SeqAn's Alignment module	René Rahn, Freie University-Berlin	Save to Calendar
1:00 - 2:00 P.M.		Code Modernization/ Software Development	Generic parallelization of SeqAn's Alignment module	René Rahn, Freie University-Berlin	Save to Calendar
		Storage / NVMe	Storage/NVMe Community - Technical Discussions, Topics & Demos		Save to Calendar
		I Survived SC	Celebrate with Intel at booth #1301 and enjoy food & beverages		Save to Calendar
1:30 - 1:45 P.M.	Presentation Theater	Google Cloud Platform	Discover the benefits of Intel® Xeon® Scalable Processor inside Google Cloud Platform	TBD	Save to Calendar
2:00 - 2:15 P.M.	Presentation Theater	Code Modernization/ Software Development	Solve the hard problems with CONVERGE and Intel	Kelly Senecal, Convergent Science	Save to Calendar
2:00 - 3:00 P.M.		Architecture - Hardware & Software & System	Community Time		Save to Calendar
		Code Modernization/ Software Development	Solve the hard problems with CONVERGE and Intel	Kelly Senecal, Convergent Science	Save to Calendar
		I Survived SC	Celebrate with Intel at booth #1301 and enjoy food & beverages		Save to Calendar
3:00 P.M.	Closed				