2019 Chair
Michela Taufer
Denver, CO

2019

Top Ten Supercomputers (Via Top500 List, November 2019)
- Summit
- Sierra
- Sunway TaihuLight
- Tianhe-2A
- Frontera
- Piz Daint
- Trinity
- Al Bridging Cloud Infrastructure
- SuperMUC-NG
- Lassen

Test of Time Award Winner
SC08 Paper: From Dense Linear Algebra to GPU Occupancy
Authors: Vasily Volkov, James Demmel

Gordon Bell Prize Finalists
- A Data-Centric Approach to Extreme-Scale Ab Initio Dissipative Quantum Transport Simulations
  Authors: Alexandros Nikolaos Zoglaz, Tal Ben-Nun, Guillermo Indalecio Fernandez, Timo Schneider, Mathieu Luisier, Torsten Hoefler
- Fast, Scalable and Accurate Finite-Element Based Ab Initio Calculations Using Mixed Precision Computing: 46 PFLOPS Simulation of a Metallic Dislocation System
  Authors: Sambit Das, Phani Motamarri, Vikram Gavini, Bruno Turcksin, Ying Wai Li, Brent Leback

Plenary Sessions
Keynote: Exploring the Solar System with the Power of Technology
Speaker: Steven Squyres

HPC Is Now Plenary: When Technology Kills
Moderator: Keri Savoca
Panelists: Eric Hunter, Erin Kenneally, Ben Rothke

SCinet Network Architecture
Wide Area Network Capacity: 4.22 Tbps
Wide Area Connection Currucuits: (38)100 Gbps, (1)400 GbE, (2)110 Gbps
Network Carrier Providers: CenturyLink (12)100 Gbps, Zayo (4)100 Gbps, ESnet (5)100 Gbps, Internet2 (2)100 GbE/Spectrum (15)100 Gbps, (1)400 GbE