

# SC21

**2021 Chair**  
**Bronis R. de Supinski**  
 St. Louis, MO

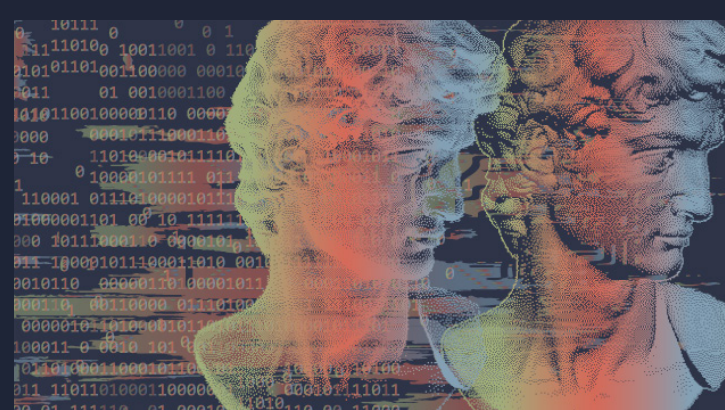
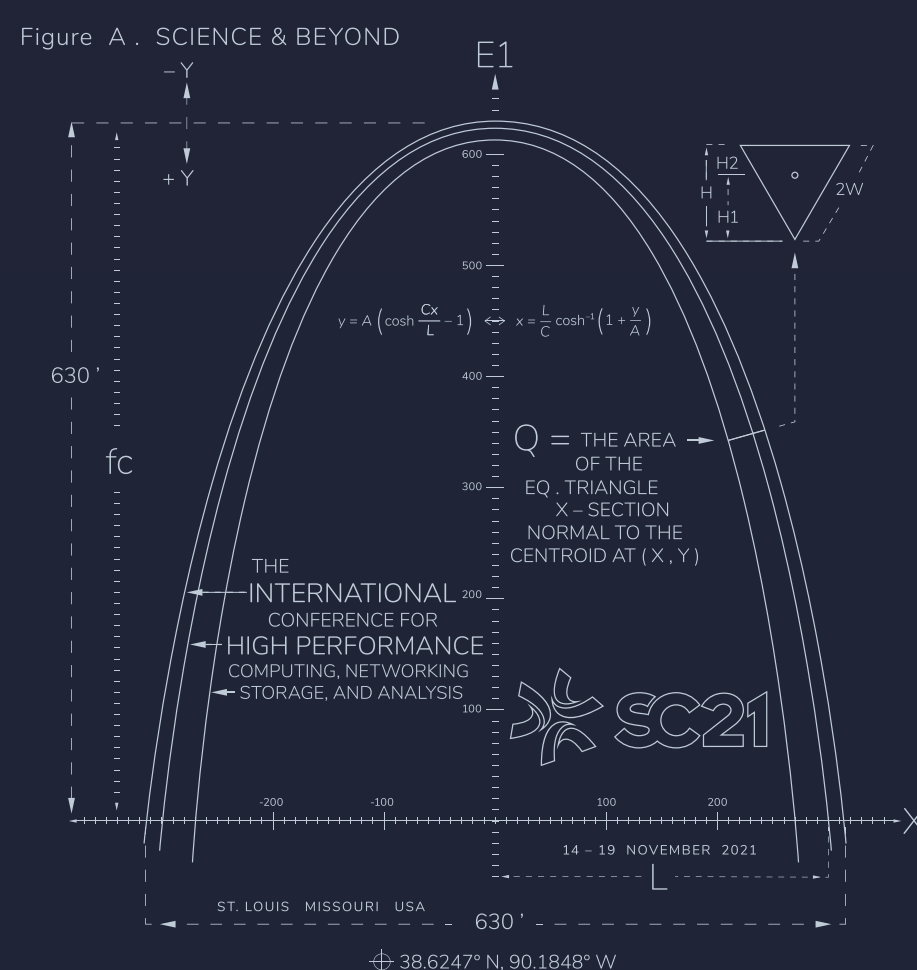


## First SC in St. Louis



### A Hybrid Experience

More than 800 volunteers band together to deliver the first hybrid SC to more than 6,550 in-person and remote attendees.



### Science & Beyond

Keynote Vint Cerf shares how HPC has a groundbreaking effect on how we can better appreciate and understand the study of languages and literatures, the arts, history and philosophy.



### Inclusivity

Shaundra Daily of Duke University delivers SC's first Inclusivity Talk, and SC21 hosts six Affinity Group Meetings on Discord.

## 2021

### Top Ten Supercomputers (Via TOP500 List, November 2021)

- |                   |                       |
|-------------------|-----------------------|
| Fugaku            | Selene                |
| Summit            | Tianhe-2A             |
| Sierra            | JUWELS Booster Module |
| Sunway TaihuLight | HPC5                  |
| Perlmutter        | Voyager-EUS2          |

### Test of Time Award

**SC98 Paper: Multilevel Algorithms for Multi-Constraint Graph Partitioning**  
 Authors: George Karypis, Vipin Kumar

### Gordon Bell Prize

**Closing the "Quantum Supremacy" Gap: Achieving Real-Time Simulation of a Random Quantum Circuit Using a New Sunway Supercomputer**

Authors: Yong (Alexander) Liu, Xin (Lucy) Liu, Fang (Nancy) Li, Yuling Yang, Jiawei Song, Pengpeng Zhao, Zhen Wang, Dajia Peng, Huarong Chen, Haohuan Fu, Wenzhao Wu, Heliang Huang, Chu Guo

### Best Paper Award

**Revealing Power, Energy and Thermal Dynamics of a 200PF Pre-Exascale Supercomputer**

Authors: Woong Shin, Vladyslav Oles, Ahmad Maroof Karimi, J. Austin Ellis, Feiyi Wang

### Best Reproducibility Advancement Award (INAUGURAL)

**HPAC: Evaluating Approximate Computing Techniques on HPC OpenMP Applications**

Authors: Konstantinos Parasyris, Giorgis Georgakoudis, Harshitha Menon, James Diffenderfer, Ignacio Laguna, Daniel Osei-Kuffuor, Markus Schordan

### Plenary Sessions

**Keynote: Computing and the Humanities** Speaker: Vint Cerf

**Science & Beyond Plenary: The Intersection of Ethics and HPC**

Moderator: Daniel A. Reed Panelists: Cristin Flynn Goodwin, Tony Hey, Ellen Ochoa, Joel Saltz

### SCinet Network Architecture

More than 165 volunteers representing 87 companies and organizations planned, built, and operated SCinet.

- Wide Area Network Capacity: 2.2 Tbps
- Wireless Access Points: 325
- Floor Spool Total Length: 6 miles/Aerial Strand Total Length: 10 miles

### SC21 TV

In an expansion of the seminal SC News Desk, SC21 TV Producer Rich Finlinson and team conducted 57 interviews of committee members and industry luminaries, many of which were live-streamed from the SC21 exhibit floor. They are archived in a playlist on the SC Conference Series YouTube channel.