

All papers listed here are available via Emory Libraries. Pick a paper → go to the #presentations channel on Slack → announce the paper that you will be presenting. I will add a few more papers to this list.

Your presentation will be 20-25 mins long, followed by 5-10 mins for questions.

APPLICATIONS

1. 11 PFLOP/s Simulations of Cloud Cavitation Collapse.
2. ~~Petascale Direct Numerical Simulation of Blood Flow on 200K Cores and Heterogeneous Architectures~~
3. ~~The Cat is Out of the Bag: Cortical Simulations with 109 Neurons, 1013 Synapses~~
4. ~~Big Data Staging with MPI IO for Interactive X-ray Science~~

ARCHITECTURE

5. ~~Anton 2: raising the bar for performance and programmability in a special purpose molecular dynamics supercomputer~~
6. ~~Exascale Computing and Big Data~~
7. ~~Top Ten Exascale Research Challenges. Office of Science~~
 - Focus on any 3 of the 10 challenges listed

SYSTEMS AND RUNTIME

8. ~~Parallel Scripting for Applications at the Petascale and Beyond~~
 - Suggest that you refer to Swift (<http://swift-lang.org/main/>) and include it in your presentation
9. Present a case-study of Swift in action
 - Refer to some of the applications listed on their page (<http://swift-lang.org/main/>)
10. ~~MapReduce: simplified data processing on large clusters~~
11. ~~MapReduce for data intensive scientific analyses~~