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
8. Focus on any 3 of the 10 challenges listed

SYSTEMS AND RUNTIME

9. 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
10. Present a case-study of Swift in action
    - Refer to some of the applications listed on their page (http://swift-lang.org/main/)
11. ~~MapReduce: simplified data processing on large clusters~~
12. ~~MapReduce for data intensive scientific analyses~~