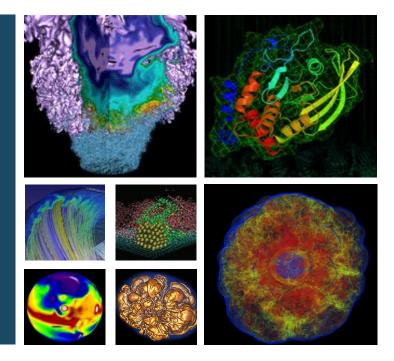
# PDSF Site Report





**Georg Rath, James Botts, Jan Balewski, Jefferson Porter** 

**HEPIX19 Spring/25.03.2019** 

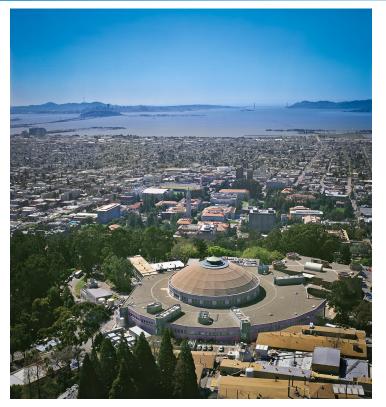




### **National Energy Research Scientific Computing Center**









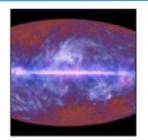


#### **NERSC** history of experimental & observational science projects





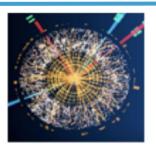
Palomar Transient Factory Supernova



Planck Satellite Cosmic Microwave Background Radiation



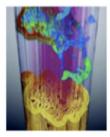
Alice Large Hadron Collider



Atlas Large Hadron Collider



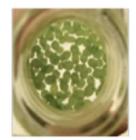
Dayabay Neutrinos



ALS Light Source



LCLS Light Source



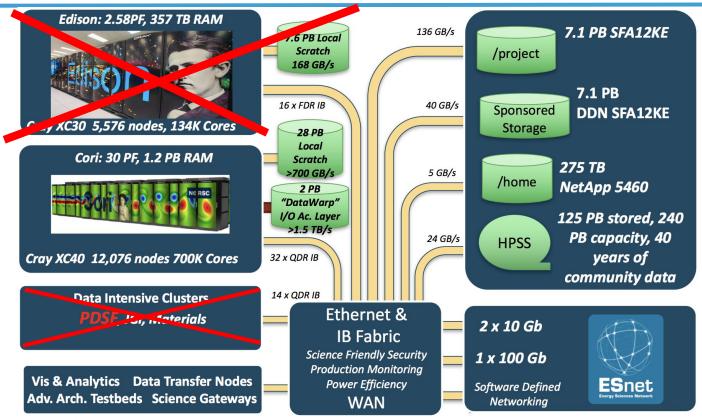
Joint Genome Institute Bioinformatics





## **NERSC Systems Today**









# PDSF: Parallel Distributed Systems Facility serving the community since 1996





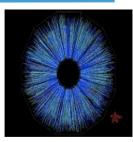












- Serial, high throughput
- Slurm workload manager
- Broad user base
- FairShare scheduling
  - Projects "buy in" to PDSF and the priority is adjusted accordingly
- STAR Tier-1, ALICE Tier-2, ATLAS Tier-3





## What happened since last time...



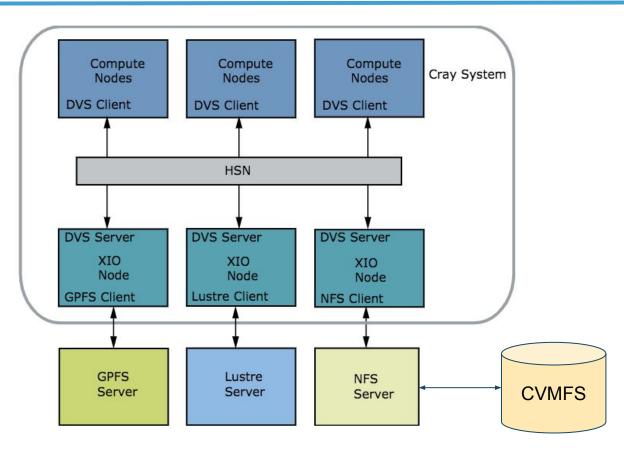
- PDSF will be turned off by April 2019
- Migration to Cori for workloads complete
  - 50/50 Split of PDSF for ease of migration
  - Cray on Commodity
- CVMFS on Cori





## **CVMFS** on Cori via DVS









### The End of the Line



- ALICE move to Shifter containers
- Edge Services (CVMFS Proxy) moved to SPIN
- Edison will be turned off May 13, 2019
- PDSF will be shut down in seven days
  - Login Nodes will stay online until September
- NERSC-9 "Perlmutter", delivery late 2020
  - Converged Data/Simulation System
  - Cray Shasta Platform/Slingshot Fabric
  - Optimized for Science







**Thank You** 



