

# Invitation to CHEP 2016

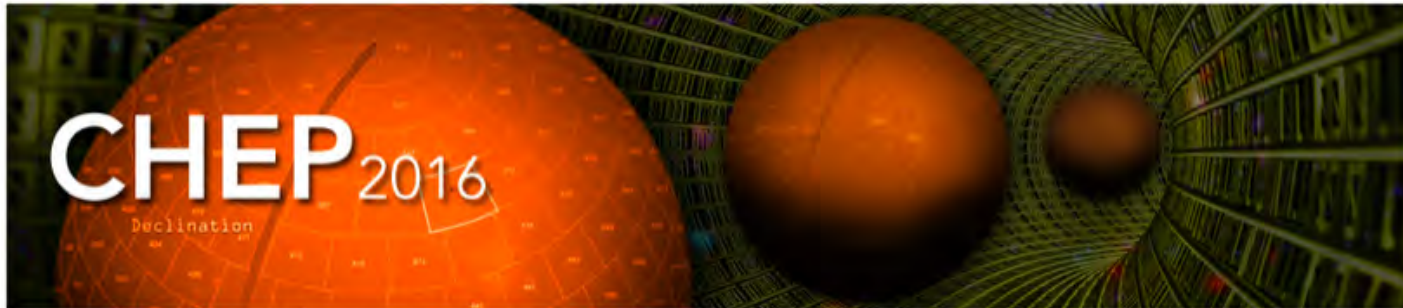
Richard P Mount

SLAC National Accelerator Laboratory

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22nd International Conference on Computing in High Energy and Nuclear Physics, Hosted by SLAC and LBNL, Fall 2016

Home

History

## Welcome

Welcome to the future home of the 22nd International Conference on Computing in High Energy and Nuclear Physics, CHEP 2016. The conference will be hosted by [SLAC](#) and [LBNL](#) in fall 2016 in the San Francisco bay area, California, USA.



# CHEP 2016: Status of Organization (1)

- SLAC contracting with Stanford University Conference Management to handle the non-scientific logistics:
  - Proposing candidate venues/dates (in September and October)
  - Interfacing with the chosen venue
  - Providing logistical support during CHEP 2016
- Working to select and announce the venue and dates real soon now!

## CHEP 2016: Status of Organization (2)

- Local Organizing Committee being formed
  - Usual suspects, +
  - Contacts with relevant non-HEP science, +
  - Contacts with possible sponsors, +
  - ...
- International Advisory Committee
  - Invitations will go out soon
  - Usual suspects, +
  - People with new ideas (suggestions welcome from all)

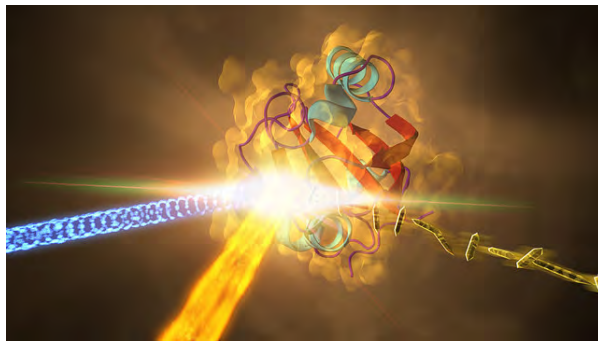
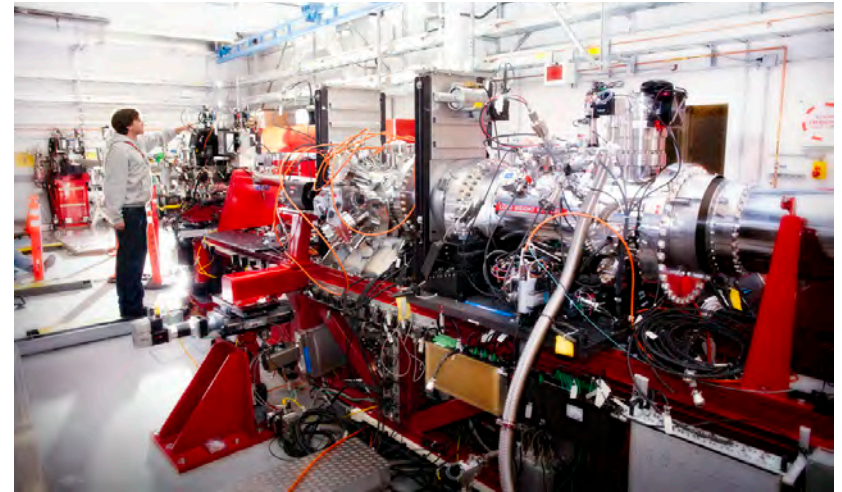
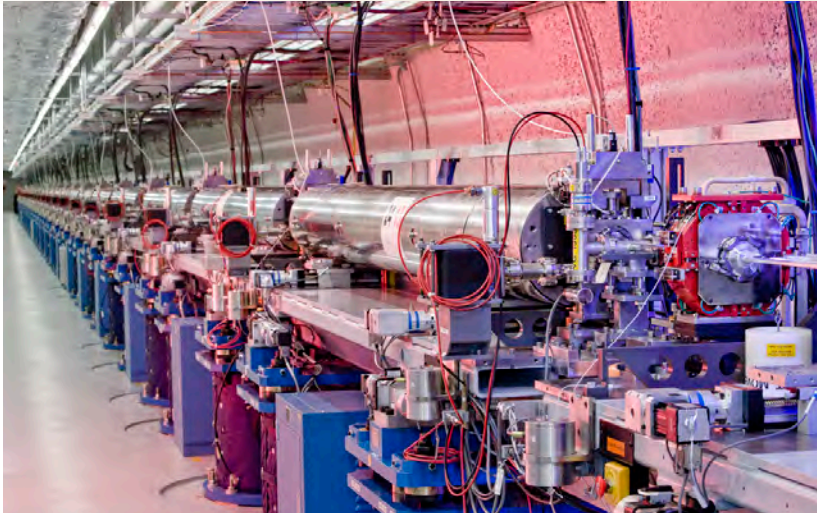
# CHEP 2016 Theme?

## Connections with the wider world:

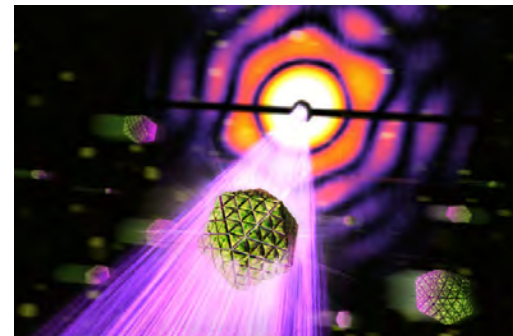
- Other sciences
- Silicon Valley and beyond

# Science at SLAC and LBNL

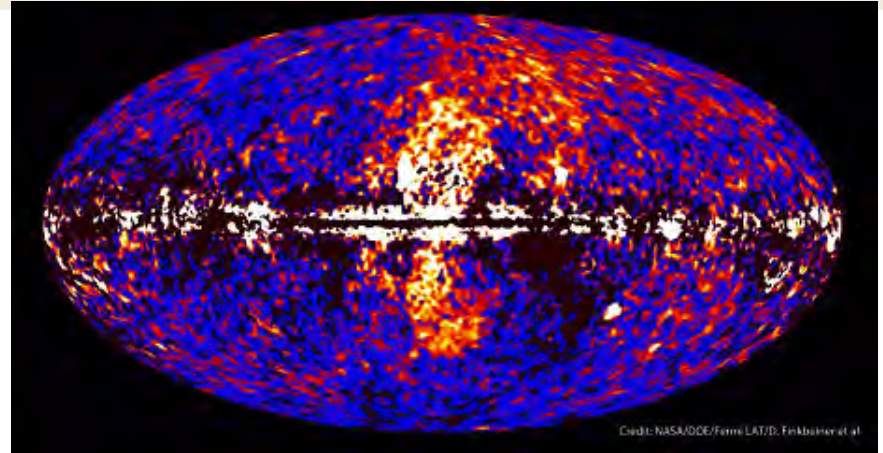
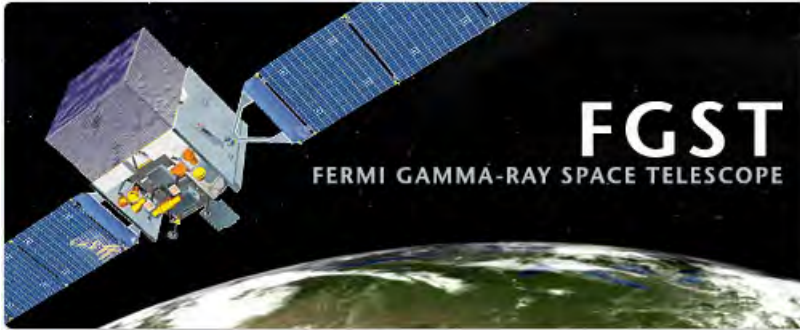
# LCLS: X-Ray Free Electron Laser



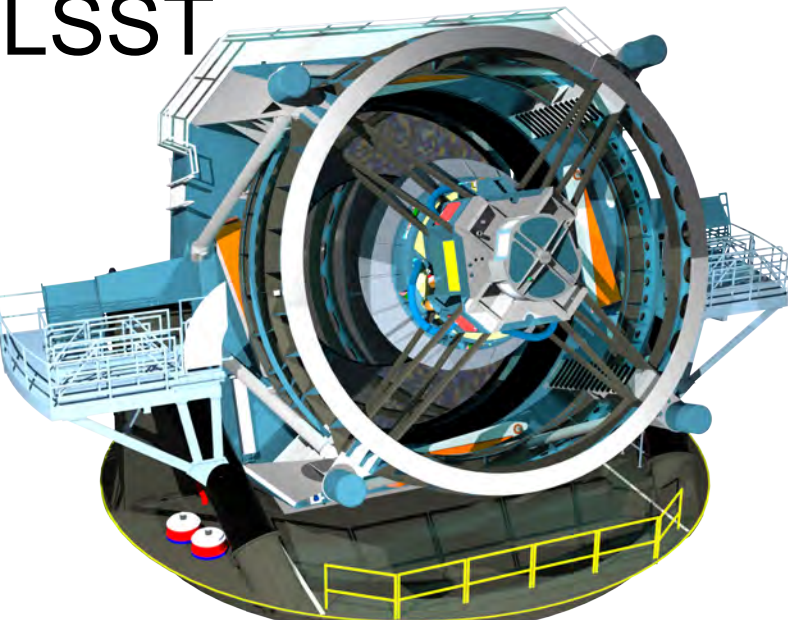
DAQ rates typical of LHC



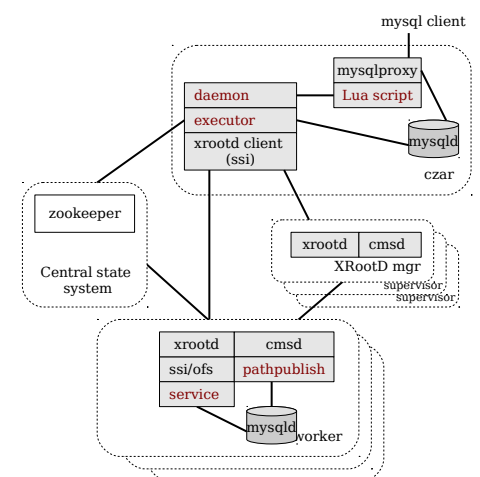
# Astrophysics and Cosmology: FGST and LSST



## LSST

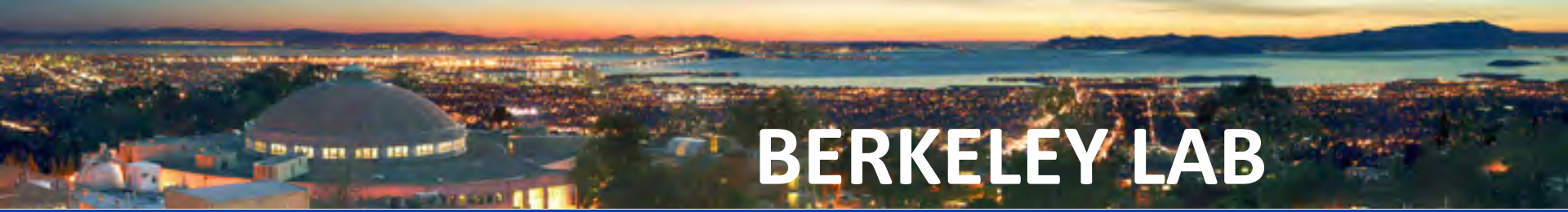


## Block diagram SLAC NATIONAL ACCELERATOR LABORATORY

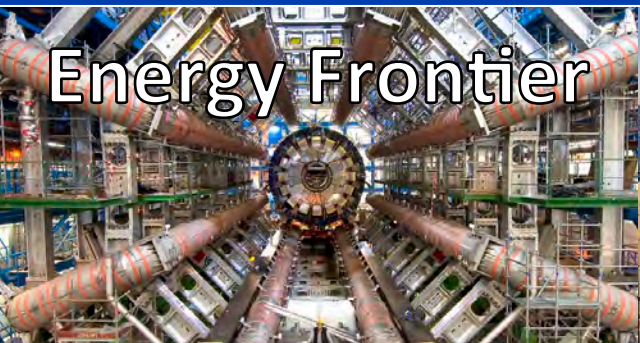


Petabyte-scale Sky Catalog database





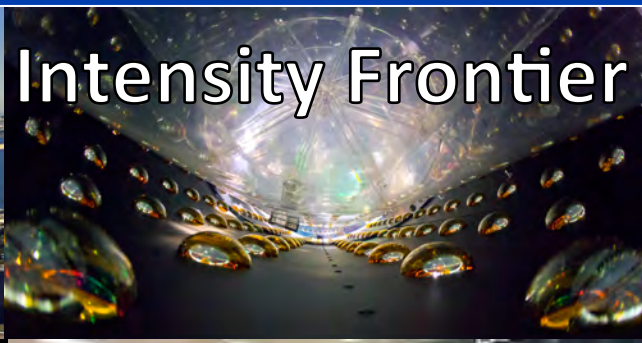
# BERKELEY LAB



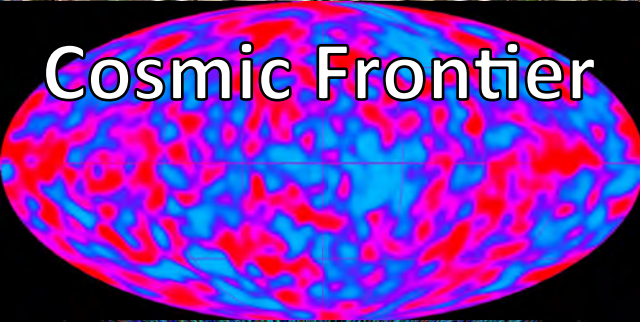
## Energy Frontier



## Facilities



## Intensity Frontier



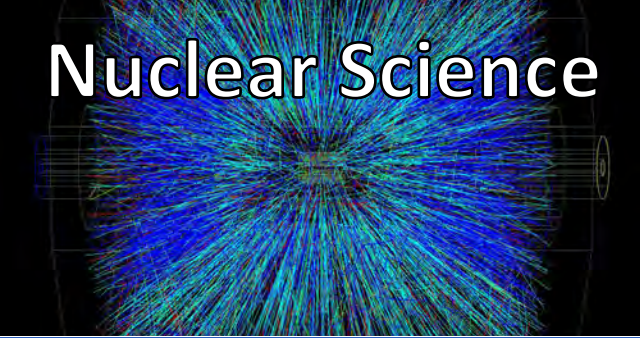
## Cosmic Frontier



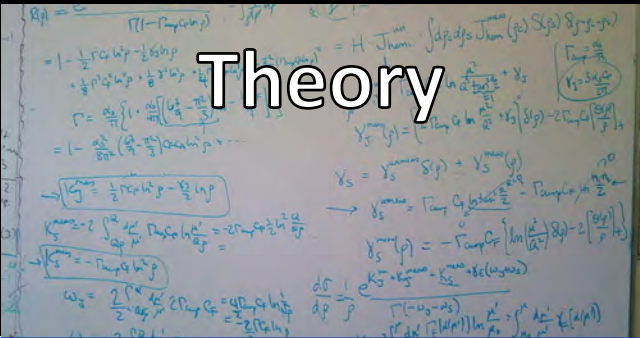
## Accelerators



## Computing



## Nuclear Science



## Theory



## Networking

# BERKELEY LAB



DOE facility; 5000 Users – Alice, ATLAS, Daya Bay, STAR, LZ; Edison (Cray XC30) 24<sup>th</sup> on Top500

DOE ASCR facility; US-LHC link; connects 40 DOE sites & 140 networks; 100 gbps backbone



US-DOE / China anti-neutrino experiment; measurement of neutrino mixing angle  $\theta_{13}$

DOE-BES facility; 40 beam lines; materials, energy, biology; 3000 users & 800 pubs/year



ATLAS core software; Gaudi, Gaudi-Hive, PyROOT, Yoda (HPC Event Serv.), G4 simulation on Edison

# The Bay Area

SLAC

Stanford

San Francisco

Berkeley

Silicon Valley



Invitation to CHEP 2016

Mount/Tull

April 17, 2015





Invitation to CHEP 2016    Mount/Tull    April 17, 2015

# SAN FRANCISCO

# SACRAMENTO

# OAKLAND

# SAN JOSE



FOOTHILL COLLEGE  
International.fhd.edu



LOS ALTOS



SAN JOSE



# And Finally

CHEP 2015 is going to be a hard act to follow!

Many thanks to Sakamoto-san, the LOC and OIST!