LLNL-DOE/SC/HEP site visit

February 9&10, 2011

Ed Hartouni

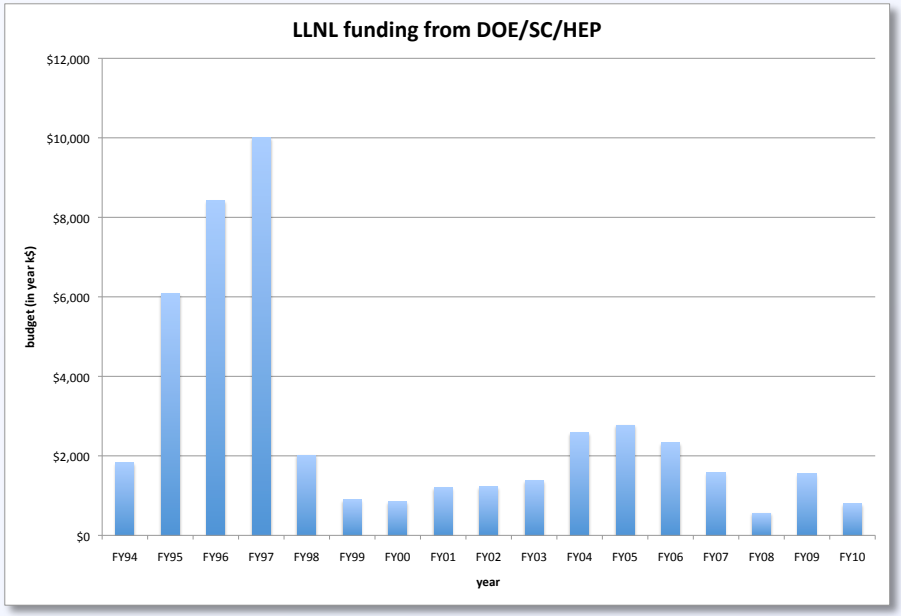
LLNL point-of-contact to DOE/SC/HEP

Physical and Life Sciences

Lawrence Livermore National Laboratory

This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Security, LLC, Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

DOE/SC High Energy Physics budget at LLNL



LLNL HEP program	FY10	FY11	FY12
Personnel Support from DOE/HEP			
(in FTEs)			
Permanent Ph.D.	0.95	1.65	1.75
Temporary Ph.D.	2.1	1.9	2.9
Graduate Student	0	0	0
Engineering / Computing Professional	0.71	0.71	0.51
Administrative / Technician	0.2	0	0
Other	0	0	0
DOE/HEP Funding			
TOTAL	$1,564,500	$1,591,000	$1,594,000

2010:

KA13

- Axion Dark Matter Experiment (ADMX)
- Large Underground Xenon experiment (LUX)
- Lattice Strong Dynamics
- Detector R&D

KA12

- BaBar
- LHC-USCMS collaboration

KA15

- Linear Collider R&D

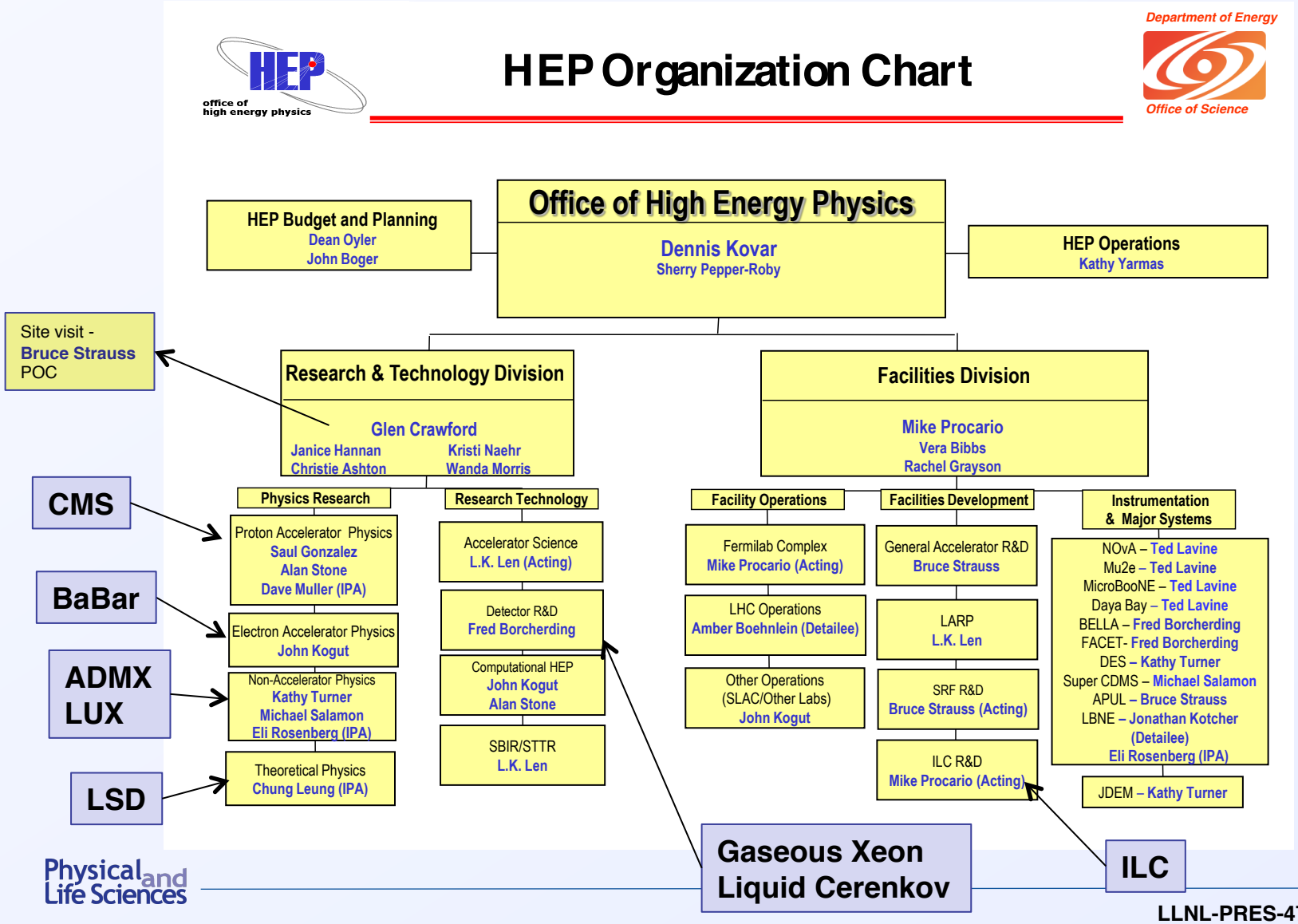
KA14

- Calculational Astrophysics Center

2010:

63 publications of which 18 are *Physical Review Letters* and one *Review of Modern Physics*

DOE/SC High Energy Physics organization



Day 1 agenda

Wednesday, February 9, 2011

12:30 p.m.	Welcome and LLNL Overview	William H. Goldstein
12:45 p.m.	LLNL HEP Program	Ed Hartouni
	Non-Accelerator	
1:15 p.m.	Large Underground Xenon (LUX) Experiment	Adam Bernstein
1:45 p.m.	Axion Dark Matter Experiment (ADMX)	Gianpaolo Carosi
2:15 p.m.	Double-CHOOZ	Nathaniel Bowden
2:45 p.m.	Large Synoptic Survey Telescope (LSST)	Scot Olivier
3:15 p.m	*Break*	
3:30 p.m.	Axion Solar Telescope (CAST) Activities	Mike Pivovaroff
	Proton-Accelerator	
4:00 p.m.	CMS Activities	Doug Wright
	Electron-Accelerator	
4:30 p.m.	BaBar	David Lange
5:00 p.m.	ILC Activities	Jeff Gronberg
5:30 p.m.	Discussion and Organize for No-host Dinner	
6:00 p.m.	Adjorn	

Day 2 agenda

THURSDAY, February 10, 2011

8:00 a.m.	GRID Computing	Ron Soltz
	Theory	
8:15 a.m.	Lattice Strong Dynamics (LSD)	Pavlos Vranas
	Detector R&D	
8:45 a.m.	Scintillator Development	Nerine Cherepy
9:15 a.m.	Gaseous Noble Gas Detectors (HPXe)	Mike Heffner
9:45 a.m.	Long Baseline Neutrino Experiment (LBNE)	Steve Dazely
	Accelerator R&D	
10:15 a.m.	Inverse Free Electron Laser (iFEL)	Scott Anderson
10:45 a.m.	Ultra-Bright Lasers (E23 Potential)	Chris Barty
11:15 a.m.	Wrap up	
11:45 a.m.	*Adjorn*	