Non-accelerator research: the Cosmic Frontier

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The goal is to present the progress
in the Cosmic Frontier effort and plans for the near future

- As in previous presentations, we have only a few slides in each presentation highlighting the current status / recent accomplishments

- Emphasis will be on the future efforts: planned activities and associated concerns and risks, but also synergy with the KIPAC Theory effort

Non-accelerator research: Plan for the Cosmic Frontier presentations

*** Current projects:**

- **Fermi overview and science** (led by Elliott Bloom): our accomplishments, and requirements/corresponding needs to make the best of the Fermi data as relevant to the DoE mission (18 min);
- **Fermi ISOC** (led by Rob Cameron): the current role, plan for the future, connection to the Fermi science covered in the previous talk, staffing (12 min);

*** Future projects / ongoing projects with future SLAC involvement:**

- **CTA-US, a.k.a. AGIS** (led by Justin Vandenbroucke, covering for Stefan Funk) as the natural extension of the Fermi effort, with the focus on the SLAC's role (12 min);
- **CDMS** (led by Eduardo Do Couto e Silva) - emphasis on the SLAC's role, connection to FermiLab, staffing issues, concerns; data pipeline etc. (18 min);
- **CMB** work with SLAC's involvement (led by Chao-Lin Kuo) – effort at SLAC in the larger context (12 min)
- **Dark Energy projects** (led by Steve Kahn) - (30 min), including:
  - Brief overview of **DES** and the SLAC's role
  - **Dark Energy cosmology studies with clusters**, including X-rays, connection to lensing etc.,
  - **LSST** - the next big project for SLAC
  - Possible SLAC's role in **WFIRST** and the **Big Boss**

Financials

FY11 Funding Request

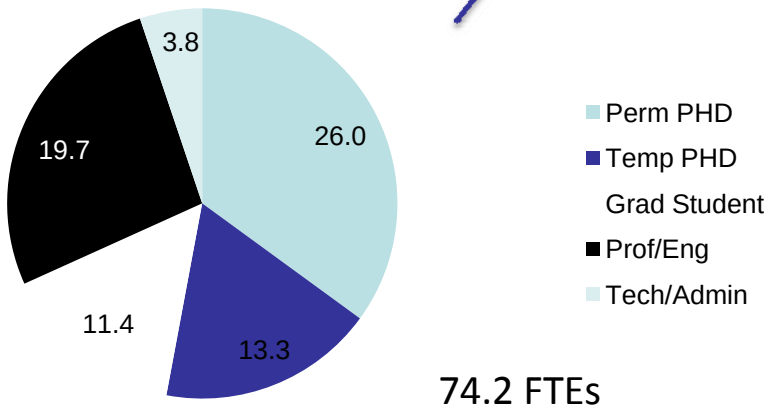
B&R	Description	FY 2009 Funding	FY 2010 Funding Programmatic	FY 2011 Requested'	FY 2012 Scenario A' Super B
KA1101021	Atlas Research	$ 5,321	$ 3,959	$ 4,100	$ 4,133
KA1102054	Atlas M&O **	$ 22	$ 1,193	$ 909	$ 909
KA1102054	Atlas Tier 2 Comp.	$ 600	$ 600	$ 600	$ 1,150
KA1202012	BaBar Detector Operations	$ 4,157	$ 4,194	$ 2,641	$ 4,042
KA1202012	Supplement for BaBar due to slower ramp down				
KA1202022	BaBar Equipment	$ 2,326	$ 500	$ 250	$ 250
KA1202012	BaBar D&D	$ 3,871	$ 4,085	$ 4,009	
	Det Ops	$ 10,354	$ 8,779	$ 6,900	$ 4,292
KA1202011	PEP MMS/ D&D	$ 2,956	$ 2,553	$ 2,880	$ 7,300
	B Factory ST	**$ 13,310**	**$ 11,332**	**$ 9,780**	**$ 11,592**
		$ 8,028			
KA120102	Electron Res (BaBar , Super B, SiD,..)	$ 8,319	$ 8,322	$ 6,321	$ 4,328
KA1301021	Non Acc Res. - Cosmic	$ 18,945	$ 16,011	$ 18,781	$ 20,734
KA1301022	Non Acc Res. - Intensity - EXO		$ 3,199	$ 3,519	$ 2,521
KA1301032	LSST R&D**	$ 2,824	$ 3,000	TBD	TBD
KA1301032	CDMS R&D	$ -	$ 300	TBD	TBD
	CTA R&D			TBD	TBD
KA140102	Theory	$ 7,795	$ 7,795	$ 7,989	$ 8,149
KA140105	HEP Computing (SPIRES and G4)		$ 1,458	$ 858	$ 2,695
KA140105	Supplement for SPIRES and SciDB				
KA150302	Det R&D	$ 3,194	$ 3,178	$ 3,398	$ 3,784
	ESTB		$ 1,500		
KA150102	Acc. Science*	$ 8,802	$ 9,030	$ 9,134	$ 10,508
KA1502011	General Acc Development	$ 4,052	$ 4,052	$ 3,452	$ 4,139
KA1502021	ILC R&D	$ 12,434	$ 11,766	$ 10,321	$ 10,321
KA1102053	LARP	$ 1,728	$ 2,281	$ 1,845	$ 1,845
KA150102\ KA1202021	FACET Operations \AIPs	$ 2,000	$ 4,304	$ 6,000	$ 6,150
	ST	$ 89,346	$ 93,280	$ 87,007	$ 92,958
	Computing Recharge ***		$ 430	$ 3,300	$2.8 M Inc . Above
	FY 12 Supplement for Multi-program Financial Model				~$4.3M Supplement
	Core Programs	$ 56,428	$ 57,004	$ 57,552	$ 60,991
	ST w/o Comp Re-Charge, LSST, CTA, CDMS and ESTB	$ 86,522	$ 88,480	$ 87,007	$ 92,958

Notes:
Assume 52% Indirects
Doesn't include ARRA - FACET and Early Career Award, SciDAC, KA1202023, Univ. Sub accounts and DOE-exchange program ($[illegible]K in FY11 President's).
*FY09 funding does not include $[illegible]K of equipment for BNL Klystron. Considered work for others.
** FY10 funding does not include $[illegible]K received from Atlas M&O for 27 boards and $[illegible]K FPT from SLAC to BNL for LSST R&D
*** Received $430K supplemental funding for FY10 Atlas T2 computing re-charge.
For FY11 we assume the financial scenario A' Super B slightly modified
The 2% salary increase and inflation increases cost for Core Programs from FY10 to FY11 by ~$1M .

Financials – Non-Accelerator Research (Cosmic Frontier)

B&R	Description	FY 2009 Funding	FY 2010 Funding	FY 2011 Requested'	FY 2012 Scenario A' Super B
KA1301021	Non Acc Res. - Cosmic	$ 18,945	$ 16,011	$ 18,781	$ 20,734

FTE by Type



74.2 FTEs

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