NSF-PHY News

Joe Dehmer Division of Physics, NSF

NSAC March 2, 2009

Major Projects

- Projects Under Construction
 - IceCube
 - AdvLIGO
- New Project in Preliminary Design Phase
 - DUSEL (long baseline neutrino detector, Dark Matter, proton decay, neutrinoless double beta decay, lowenergy nuclear reactions, supernovae/primordial neutrinos)
- Proposed Upgrade
 - LHC Detectors

NSF Annual Review of the DUSEL Design Project

- Held at U.C. Berkeley (S3 awardee institution).
- 28-30 January 2009.
- Diverse group of 24 world-class experts.
- Charged to evaluate:
 - Project status & progress to date;
 - Plans to deliver a comprehensive Preliminary Design on stated project time scales;
 - All major elements of the project: science, cost, schedule, risks, management, ES&H, E&O, etc., at whatever stage they are at.

This important first review is intended to provide the NSF with an initial evaluation of the total project, with a special eye toward generating constructive recommendations from the experts that will help sharpen & guide the path moving forward.

DUSEL Design: Solicitations 3 & 4

- MREFC envisioned to consist of both facility & experiments.
- Solicitation 3 governs facility & infrastructure design.
 - U.C. Berkeley, awardee for Homestake proposal.
 - Award made July 2007, \$15M from PHY/MPS over 3 years.
- Solicitation 4 governs designs for candidate experiments.
 - Up to \$15M total from PHY/MPS, distributed over 3 years.
- S4 proposal deadline 9 January 2009.
- 25 proposals received.
 - Includes 8 non-physics (Engineering, Geosciences).
 - Many proposals are from multiple institutions (collaborative) and/or submitted on behalf of large collaborations (51 institutions).
- Will be reviewed in spring, awards made over summer.

DUSEL Working Timeline

- July '08: Internal project review of facility & infrastructure.
- January '09: NSF Project Review #1.
- January '10: NSF Project Review #2.
- December '10: NSF Preliminary Design Review (PDR).
 - Project readiness, plan will be assessed at this milestone.
- Spring '11: Presentation of DUSEL MREFC package to NSB.
- FY13: Earliest construction funding (MREFC) start, if approved.

Planning with potential partners (DOE, international, etc.) being integrated into above schedule.

Division of Physics

AMOP Physics

Elementary
Particle Physics

Part. & Nucl. Astrophysics

Physics Front.
Centers

Theoretical Physics

Nuclear Physics

Physics of Living Systems

Physics @ Inform. Front.

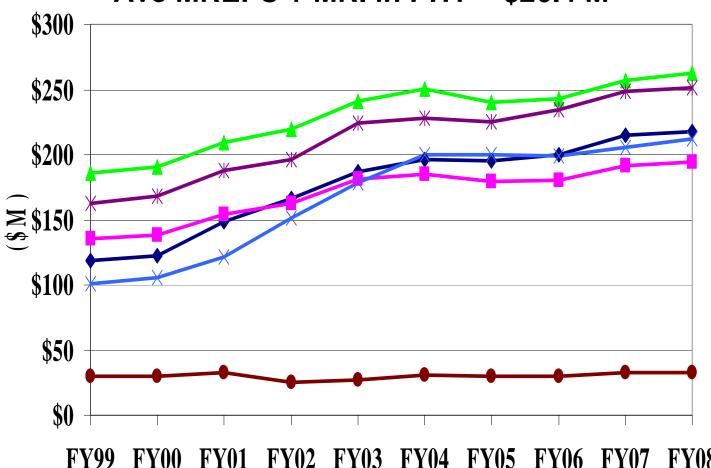
Gravitational Physics

Education & Interdisc. Res.

Accelerator Phy. & Phy. Instrum.

Ten-Year Funding History



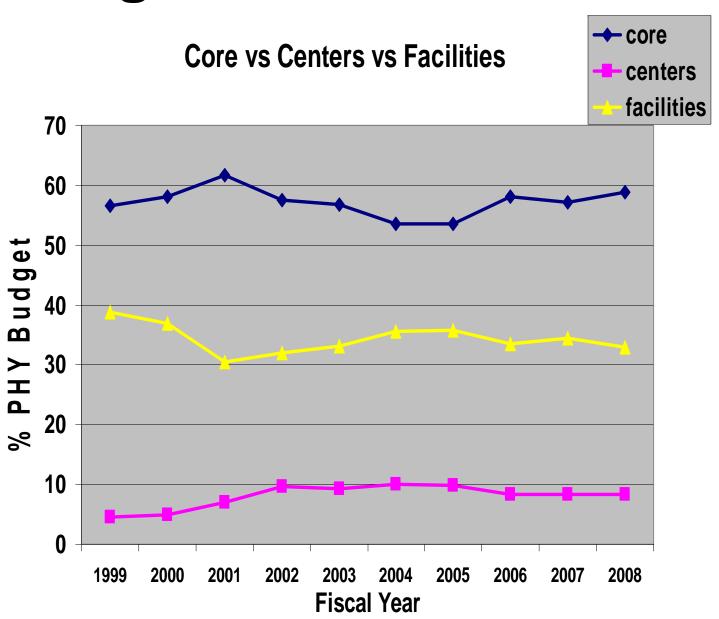


FY00 FY01 FY02 FY03 FY04 FY05 FY06 FY07 FY08

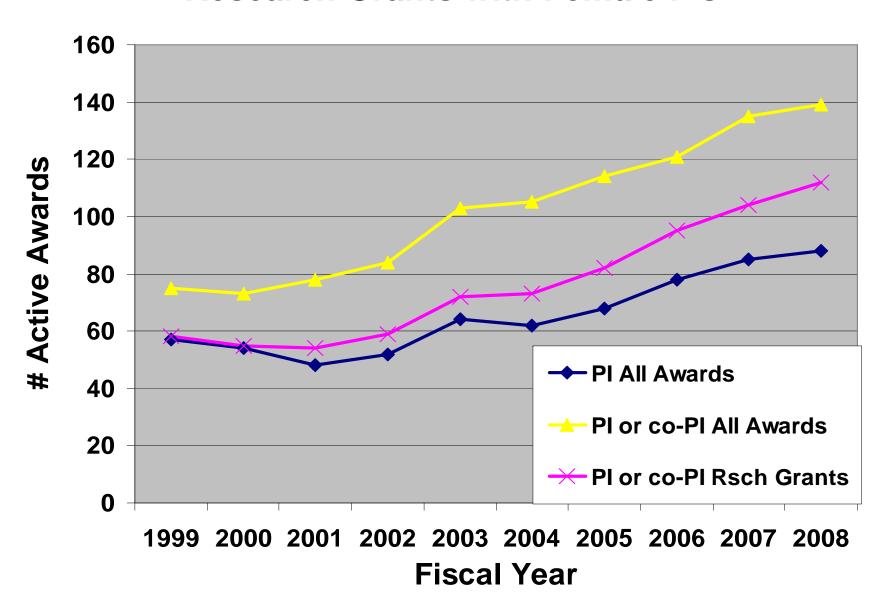
MPS by Division

			Change		Change		Change
	FY 2006	FY 2007	from 06	FY 2008	from 07	FY 2009	from 08
	Actuals	Actuals	to 07	Actuals	to 08	Request	to 09
AST	199.75	215.39	7.83%	217.90	1.17%	250.01	14.74%
CHE	180.70	191.22	5.82%	194.62	1.78%	244.67	25.72%
DMR	242.59	257.27	6.05%	262.54	2.05%	324.59	23.63%
DMS	199.52	205.74	3.12%	211.75	2.92%	245.70	16.03%
PHY	234.15	248.47	6.12%	251.64	1.28%	297.70	18.30%
OMA	29.90	32.64	9.16%	32.67	0.09%	40.00	22.44%
MPS	1086.61	1150.73	5.90%	1171.12	1.77%	1402.67	19.77%
R&RA	4054.43	4758.44	17.36%	4853.25	1.99%	5593.99	15.26%
NSF	5369.34	5884.37	9.59%	6084.04	3.39%	6854.10	12.66%

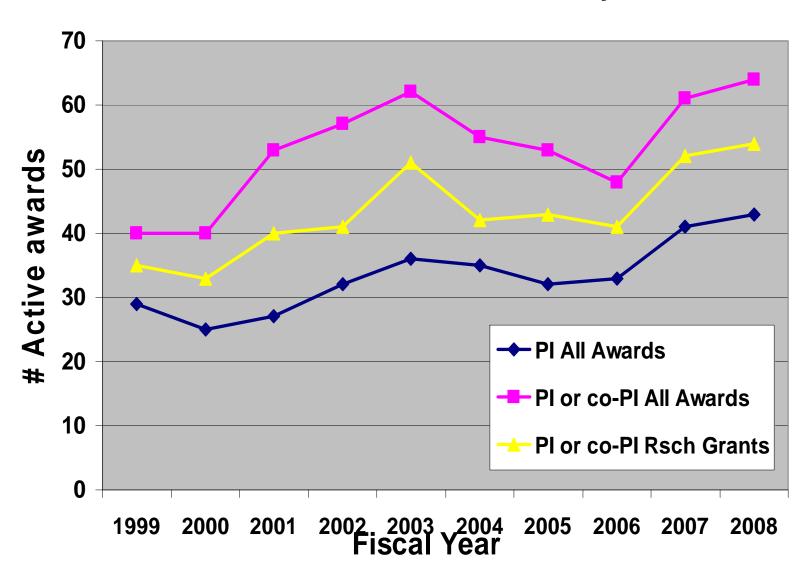
Budget sectors over time



Research Grants with Female Pls



Active Awards with Minority Pls



% of All Active Awards

