



The View from NSF

LSC - Hanford, WA 19–22 August 2002

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- **GP Funding FY 2002**
- **NSF Funding Prospects FY 2003**
- **Funding Opportunities for GWP**
- **Some Areas of Special Interest**

LIGO-G020303-00-M



Funding 2002

Budget (\$M)

	NSF	MPS	PHY	GP
FY2001	4416	850.8	187.5	32.5
FY2002	4789	922.0	195.9	38.6
Δ	8.4%	8.4%	4.5%	19%

- Gravity Program fared much better than most PHY Programs



GP Detailed Distribution

	PHY GP	LIGO (Facility)	LSC + Other (Core)
FY2001	\$32.5M	\$21.8M	\$10.69M
FY2002	38.6	28.0	10.57
Δ	\$6.1M	\$6.2M	\$- 0.12M

- **Most of the 11% initial Core base reduction, reported at March LSC Meeting, was restored to the GP base from PHY reserves**
- **Additional NSF Gravitational Research Funding in FY02:**
 - **Center for GW Physics (PFC)**
 - **Two GW source simulation projects (ITR)**
 - **LIGO participation in two ongoing Grid projects (ITR)**



FY 2003 - in Process

	NSF	R&RA	MPS	PHY
FY2002	4789	3599	922	195.9
Presidential Request	5036 (5%)	3783 (5%)	942 (2%)	191.3 (-2%)
Senate (Markup)	5353 (12%)	4132 (15%)	1057 (15%)	—

- President's request submitted to Congress in January
- President's budget has small increase for LIGO
- House Budget Authorization bill passed 397 to 25



Funding Opportunities: 2003 Gravity Program

- Submission to “PHY Support for LIGO Research”*
 - Target date: September 25, 2002
 - Proposals to LIGO Lab for review (with PI permission)
 - Presentation by PI or team to LIGO PAC
 - Independent NSF Review

* Note on commissioning activities in proposals– Stress importance to LIGO success and creative aspects.



Additional Funding Opportunities: Other Programs

- Information Technology Research (ITR) Program
 - Announcement due very soon
- Major Research Instrumentation (MRI) Program
 - Special opportunities for undergraduate and (possibly) minority serving institutions
 - PHY share depends on total amount requested in submissions to PHY
- Undergraduate institutions: RUI and ROA Programs
<http://www.ehr.nsf.gov/crssprgm/rui/start.shtm>



Areas of Special Interest 2002-3

- Anticipating Advanced LIGO
- LIGO Outreach development
- Identifying GWP opportunities in the ITR, MRI, and RUI Programs
- Encouraging National interest in NASA/NSF/DoE coordination in gravity research:
 - Joint NSF/NASA Task Group on GW Computation
 - Turner Report “From Quarks to the Cosmos”



NASA/NSF Cooperation on GW Computation

- Task group report has been made available to both agencies (<http://astrogravs.gsfs.nasa.gov>).
- GW source simulations are regarded by both NASA and NSF as an important area for cooperation.
- Time scales and formats for actual cooperative programs are under consideration.



Turner Report

Observes that:

-“More that ever before, astronomical discoveries are driving the frontiers of physics, and more than ever before our knowledge of physics is driving the understanding of the universe and its contents. ”

and recommends:

- “the agencies [DoE, NASA & NSF] proceed with an advanced technology program to develop instruments capable of detecting GWs from the early universe”



Present Outlook

- NSF awaits proposal for Advanced LIGO
- President's budget requests a decrease for PHY, but Congressional sentiment strongly supportive of large increases for NSF and for MPS
- LIGO Lab support will increase but amount depends on final budget.