

# LIGO Science Collaboration

## A VIEW FROM NSF

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LIGO Funding

Review Process

Comments

Outreach

LSC White Paper

Supplements

Program Imbalance

# LIGO

## Funding Summary

	\$ (Million)		
	FY 1997 actual	FY 1998 actual	FY 1999 req.
<b>Construction</b>	<b>55.0</b>	<b>26.0</b>	<b>0.2</b>
<b>Operations</b>	<b>0.3</b>	<b>7.3</b>	<b>19.8</b>
<b>R&amp;D</b>	<b>5.9</b>	<b>6.3</b>	<b>?</b>
<b>Physics</b>	<b>5.3</b>	<b>6.0</b>	
<b>Other Sources</b>	<b>0.6</b>	<b>0.3</b>	
<b># Awards</b>	<b>13.0</b>	<b>16.0</b>	<b>?</b>

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# FY 1998

## NSF Budget Evolution

	\$ (Million)		Change	
	FY 1997 Actual	FY 1998 Plan	with LIGO	without ops *
NSF	3,298.8	3,452.0	4.6%	4.4%
MPS	693.5	715.7	3.2%	2.2%
Physics	138.6	148.5	7.1%	2.1%
LIGO R&D	5.4	?		

\*LIGO operations increased by \$7M from \$0.3M in FY 1997 to \$7.3M in FY1998

# FY 1999 Budget

	\$ (Million)		Change	
	FY 1998 Est.	FY 1999 Req.	with LIGO ops	without LIGO ops
<b>NSF</b>	<b>3,429.0</b>	<b>3,773.0</b>	<b>10.0%</b>	<b>9.7%</b>
<b>RRA*</b>	<b>2,545.7</b>	<b>2,846.8</b>	<b>11.8%</b>	<b>11.4%</b>
<b>MPS</b>	<b>715.7</b>	<b>792.0</b>	<b>10.7%</b>	<b>9.0%</b>
<b>Physics</b>	<b>148.5</b>	<b>171.9</b>	<b>15.8%</b>	<b>7.7%</b>
<b>LIGO R&amp;D</b>	<b>6.0</b>	<b>?</b>		

\* RRA change - President's request +11.8%  
House Bill +10.5%  
Senate Bill + 7.0%

# REVIEW OF PENDING NSF PROPOSALS

- NSF Request to LIGO Project
  - Provide a Scientific and Technical Evaluation
- Process within LIGO
  - Internal Staff Review
  - PAC Review
- NSF Peer Review
  - NSF Criteria

# OUTREACH

- Criterion for Support - Broader Impacts
  - “Promote teaching, training and learning”
- NSF Strategic Plan - Core Strategy
  - Integrate Research and Education
- Education is a priority at NSF, in MPS, and in Physics
  - K-12, Undergraduate, Graduate

# LSC White Paper

- LSC R&D Program
  - Choices, Branch Points
  - Schedules
  - Realistic Scope and Budget envelope
- Long Range Plan for LIGO
  - LSC generated plan preferable
  - Needed for defending budgets

# Comments

- Supplements
  - Three year awards typical
  - Stable Growth
    - Numbers of grants and funding
  - Without an extraordinary unforeseen opportunity
    - Supplements will not be awarded
- Program Imbalance
  - Strong emphasis on hardware development
  - Insufficient emphasis on data analysis and phenomenology



# Conclusions

- Funding for LIGO R&D Growing
  - Strong Support inside NSF
- Review Process Established and Working
- NSF Needs the LSC White Paper
- Desirable Changes
  - Limit supplements for extraordinary needs
  - Improve program balance in phenomenology

*Note 1, Linda Turner, 08/20/98 11:35:36 AM*  
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