

# Big $G$ and NSF

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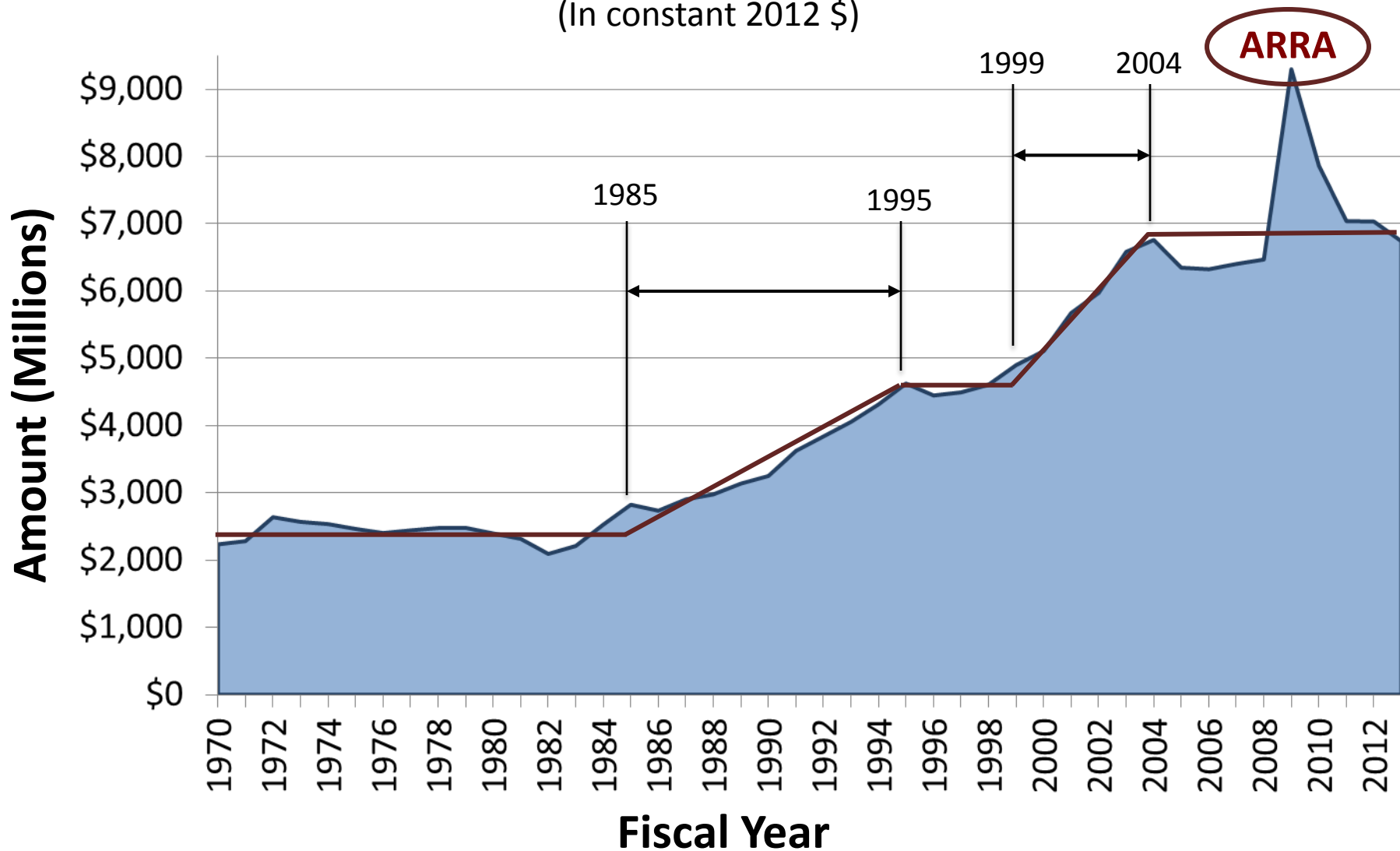
# NSF Welcomes Applications for Competitive Peer Review in All Areas

(There will be no “set aside” funds for Big G)

You may suggest reviewers (and reviewers to avoid) in the application

# 40 Year NSF Funding History

(In constant 2012 \$)



# Where To Apply?



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- 16 Program Directors (10/3/14 revision):
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  3. COTTAM- ALLEN, JEAN Physics Frontier Centers; Particle Astrophysics
  4. GILLASPY, JOHN Atomic, Molecular, and Optical Experiment
  5. GITOMER, STEVEN Plasma
  6. GONZALEZ, SAUL Particle Physics; Accelerator Science (on Detail to OSTP)
  7. HICKS, KENNETH Nuclear
  8. MARRONETTI, PEDRO Gravitational
  9. MCCLOUD, KATHLEEN Education and Interdisciplinary Research (CAREER, etc.)
  10. MIHAILA, BOGDAN Theoretical Nuclear Physics; Computational Physics
  11. OPPER, ALLENA Nuclear
  12. Ann Orel Atomic, Molecular, and Optical Theory; Quantum Information
  13. RUCHTI, RANDY Particle Physics
  14. SHANK, JAMES Particle Physics; Accelerator Science (for Saul)
  15. SHER, MARC Theoretical Particle Physics
  16. WHITMORE, JAMES Particle Astrophysics
- 8 Admin/IT Support
- 1 AAAS Fellow

# \$17M

## FY14 AMO Experiment Allocation (0.25% of NSF)

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In addition, supplemental sources of funding are available to all disciplines of physics:

- Midscale Instrumentation: \$2.7M
- Co-fund with Nuclear, Gravity, Particle, etc.
- EPSCoR
- Major Research Instrumentation: \$3.0M
- Broadening Participation, CAREER, AGEP, Etc.
- Physics Frontier Centers: \$21M



Add to AMO >\$3 M

Add to AMO >\$7M

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# \$17M

## FY14 AMO Experiment Allocation (0.25% of NSF)

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} Add to AMO >\$3 M  
} Add to AMO >\$7M

The bad news: most of the money is “already taken” (as it is every year for 3 year grants)

### **\$6.8M (40%) of allocation available**

**to support first year of proposals submitted in FY14**

**Approximately 50 new awards (5k-600k/year)**

**Ave: \$140k/yr, of 24 major awards from core alone to PhD-granting institutions**

**AMO Subdisciplines (no longer separated):**

Cold Atoms and Molecules

Precision Measurements: (25% of FY13\$)—**\$1.7M** (10% of alloc)?

Optical Physics

Collisions and Atomic Structure

(Etc.)

# How to Apply for an NSF Physics Grant: What is different this year?

- On Fastlane,  
choose solicitation

**NSF 14-576**

Do **NOT** choose anything  
else or proposal will be  
**returned w/o review!**

Program Announcement / Solicitation Number Selection

Select a Program Announcement or, if not in response to a program announcement, choose 'NSF 14-1 GPG: Not in response to a program announcement/solicitation'. If the program announcement is within multiple divisions or programs, the next page will allow you to select from the associated divisions and programs. If the program announcement is associated with only one division and program, the unit of consideration will automatically be selected.

There are currently 305 Program Announcements/Program Descriptions

Program Announcement / Solicitation Number
Select one of the items below:
NSF 14-1 Grant Proposal Guide - GPG
NSF 14-579 Facilitating Research at Primarily Undergraduate Institution...
NSF 14-578 Science of Science and Innovation Policy Doctoral Dissertat...
NSF 14-577 Advanced Technological Education
<b>NSF 14-576 Division of Physics: Investigator-Initiated Research Project...</b>
NSF 14-575 US-Japan Big Data and Disaster Research
NSF 14-574 Methodology, Measurement, and Statistics
NSF 14-572 Tribal Colleges and Universities Program
NSF 14-571 NSF/Intel Partnership on Cyber-Physical Systems Security and...

Select

Go Back

- The solicitation has **Deadlines** instead of Target Dates
  - Experimental AMO Physics: Last Wednesday in October (**Oct. 29, 2014, e.g.**)
- CAREER, MRI, PFC are unaffected.



## New Language about multiple grants (addressing the two issues highlighted in red below)

- "For PIs who anticipate having other concurrent sources of support (including but not limited to grants from other agencies or private foundations, and laboratory appointments), proposals should clearly explain how the proposed work is **distinct** from other funded activities. The proposal should also articulate the nature of commitments (such as deliverables, specific projects) associated with other sources of support. These commitments may be presented in the Project Description or in the Current/Pending Support section. [Note that the FastLane web interface for Current/Pending Support is not adequate for providing this information, and a separate file upload will be needed.] **The proposal review process will include an assessment of the proposers' ability to carry out the proposed research in light of these commitments.** PIs who have applied to more than one agency with very similar proposals will be expected to withdraw all other applications should one of these proposals be funded." -- (from solicitation 14-576).

# Postdoc (and Student) Mentoring

# Large Instrumentation

- For proposals involving development or construction of **complex instrumentation** (typically above \$1M), the following aspects will be assessed during the review:
  - Ability of the proposers to deliver within the proposed budget
  - Cost, schedule and risk mitigation management (project management documentation should be uploaded as a Supplementary Document)

## Additional Criteria

- **List of collaborators** that do not fit in the Bio sketches (such as those of large collaborations) should be included as Supplementary Document
  - Identify those members with whom the PIs work closely

End

# New Criteria This Year

- PIs who have or anticipate **additional concurrent sources of support** should clearly explain the differences between this proposal and the other awards (including ALL grants regardless of the agency of origin)
  - Where? **Project Description** or **Current & Pending** (you may need to upload a separate file in this case)
  - *“The proposal review process will include an assessment of the proposers’ ability to carry out the proposed research in light of these commitments”*
  - PIs with similar proposals for different agencies will be expected to withdraw all other applications should one of them be funded

# Success Rate

- Approximately 100 proposals.
- 87 in FY18 AMO Panel (74 from PhD granting institutions).
- 24/74 (32%) core-funded (relatively good).
- 37/87 (43%) received some degree of funding.