

NSF-PHY News

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**HEPAP
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Topics

- **New Program Director for Theory**
- **FY 2009 Current Plan**
- **ARRA (PHY, MRI #2, and ARI)**
- **FY 2010 President's Request**
- **EPP and PNA budget information**
- **DUSEL Update**

NSF Budget

| | FY 2008 Actual | FY 2009 Omnibus | FY 2009 ARRA | FY 2010 Request | Change over FY 2009 | |
|---|-------------------|--------------------|-------------------|--------------------|------------------------|---------------|
| Research & Related Activities | \$4,853.24 | \$5,183.10 | \$2,500.00 | \$5,733.24 | \$550.14 | 10.6% |
| Education & Human Resources | 766.26 | 845.26 | 100.00 | 857.76 | 12.50 | 1.5% |
| MREFC | 166.85 | 152.01 | 400.00 | 117.29 | -34.72 | -22.8% |
| Agency Operations & Award Management | 282.04 | 294.00 | 0.00 | 318.37 | 24.37 | 8.3% |
| National Science Board | 3.82 | 4.03 | 0.00 | 4.34 | 0.31 | 7.7% |
| Office of Inspector General | 11.83 | 12.00 | 2.00 | 14.00 | 2.00 | 16.7% |
| Total, National Science Foundation | \$6,084.04 | \$6,490.40 | \$3,002.00 | \$7,045.00 | 554.60 | 8.5% |

Change over FY
2008: +961M,
+15.8%

R&RA Budget

| | FY 2008 Actual | FY 2009 Omnibus | FY 2009 ARRA | FY 2010 Request | Change over FY 2009 | |
|--|-------------------|--------------------|-------------------|--------------------|------------------------|--------------|
| Biological Sciences | \$613.42 | \$653.81 | \$260.00 | \$733.00 | \$79.19 | 12.1% |
| Computer and Information Sci & Eng | 535.26 | 573.74 | 235.00 | 633.00 | 59.26 | 10.3% |
| Engineering (<i>less SBIR/STTR</i>) | 531.23 | 564.94 | 215.00 | 632.00 | 67.06 | 11.9% |
| SBIR/STTR | 109.07 | 119.21 | 50.00 | 132.52 | 13.31 | 11.2% |
| Geosciences | 757.87 | 807.13 | 347.00 | 909.00 | 101.87 | 12.6% |
| Math & Physical Sciences | 1,171.13 | 1,255.96 | 490.00 | 1,380.00 | 124.04 | 9.9% |
| Social, Behavior, & Economic Sciences | 215.18 | 229.80 | 85.00 | 257.00 | 27.20 | 11.8% |
| Office of Cyberinfrastructure | 185.15 | 199.28 | 80.00 | 219.00 | 19.72 | 9.9% |
| Office of International Sci & Eng | 47.77 | 44.03 | 14.00 | 49.00 | 4.97 | 11.3% |
| Office of Polar Programs | 447.13 | 470.67 | 174.00 | 516.00 | 45.33 | 9.6% |
| Integrative Activities | 238.56 | 263.03 | 550.00 | 271.12 | 8.09 | 3.1% |
| U.S. Arctic Research Commission | 1.47 | 1.50 | - | 1.60 | 0.10 | 6.7% |
| Research & Related Activities | \$4,853.24 | \$5,183.10 | \$2,500.00 | \$5,733.24 | \$550.14 | 10.6% |



MPS Budget

| | FY 2008 Actual | FY 2009 Current Plan | FY 2009 ARRA | FY 2010 Request | Change over FY 2009 Current Plan | |
|---|-------------------|----------------------------|-----------------|--------------------|-------------------------------------|-------------|
| | | | | | Amount | Percent |
| Astronomical Sciences | \$217.90 | \$228.62 | \$85.80 | \$250.81 | \$22.19 | 9.7% |
| Chemistry | 194.62 | 211.35 | 103.00 | 238.60 | 27.25 | 12.9% |
| Materials Research | 262.55 | 282.13 | 106.90 | 308.97 | 26.84 | 9.5% |
| Mathematical Sciences | 211.75 | 226.18 | 98.00 | 246.41 | 20.23 | 8.9% |
| Physics | 251.64 | 274.47 | 96.30 | 296.08 | 21.61 | 7.9% |
| Office of Multidisciplinary Activities | 32.67 | 33.21 | - | 39.13 | 5.92 | 17.8% |
| Total, MPS | \$1,171.13 | \$1,255.96 | \$490.00 | \$1,380.00 | \$124.04 | 9.9% |

MPS MREFC Projects

| | FY 2008 Actual | FY 2009 Omnibus | FY 2009 ARRA | FY 2010 Request |
|----------------|---------------------------|----------------------------|-------------------------|----------------------------|
| AdvLIGO | \$32.75 | \$51.43 | - | \$46.30 |
| ALMA | 102.07 | 82.25 | - | 42.76 |
| ATST | - | 7.00 | 146.00 | 10.00 |
| IceCube | 18.74 | 11.33 | - | 0.95 |

AdvLIGO

Third year of a seven-year project that began in April 2008. Major initial activities include the placing of long lead-time orders and the preparation of the sites for the upgrade.

ALMA

Milestones for FY 2010 are expected to include:

- Acceptance of the first European antennas

- Acceptance of the eighth through fourteenth North American antennas

- Transport of several antennas to the final, high-altitude site in Chile

- Start of commissioning

ATST

It is anticipated that the federal environmental and cultural compliance activities will be completed in FY 2009 and construction will begin in early FY 2010. \$146.0 million of ARRA MREFC funding will initiate construction.

IceCube

Preliminary data acquisition with partial array underway; two seasons remain to completion on time and within budget

EPP & PNA Budget

- **EPP ARRA = \$13.99M**
- **PNA ARRA = \$15.31M**
- **CESR ARRA = \$1.3M**
- **TP ARRA = \$6.8M**
- **Comment on ARRA strategy**
- **Core EPP and PNA reduced \$1M ea for FY 09 to provide early bump for DUSEL lifecycle profile**
- **PNA increases \$20M to match lifecycle profile starting in FY 09**
- **All other increases \$1M or less per program**

DUSEL Update

- **Funding Prognosis**
- **Project Office set up at UBC**
- **Developments at Homestake**
- **DOE-NSF DUSEL Physics JOG to oversee joint stewardship of DUSEL physics program**
- **S4**

DUSEL Update

- Primary target is Preliminary Design (CD-2) project baseline in December 2010.
 - Would support FY13 MREFC construction start (NSF/NSB decision in FY 11)
- First annual review of DUSEL project January 09 at UC Berkeley.
 - 25 world-class experts, charged with evaluating project status and plans.
 - Recommended additional funding will be made available to complete Preliminary Design.
 - Proposal received last week. Review results and analysis will be brought to the National Science Board in Aug 09.
- S4 review process progressing.
 - 25 proposals received: 15 physics, 10 other disciplines.
 - DOE attending panel review as observers. Funding decisions will be discussed by agencies at July JOG meeting.
 - Decisions announced over summer.
- DUSEL R&RA lifecycle funding plan developed by PHY.
 - Supports design, R&D, O&M, support for research groups.
 - Complementary to MREFC construction funding.
 - Plan approved by NSF upper management.
- *From Sanford Laboratory: 4850L now dry.*

