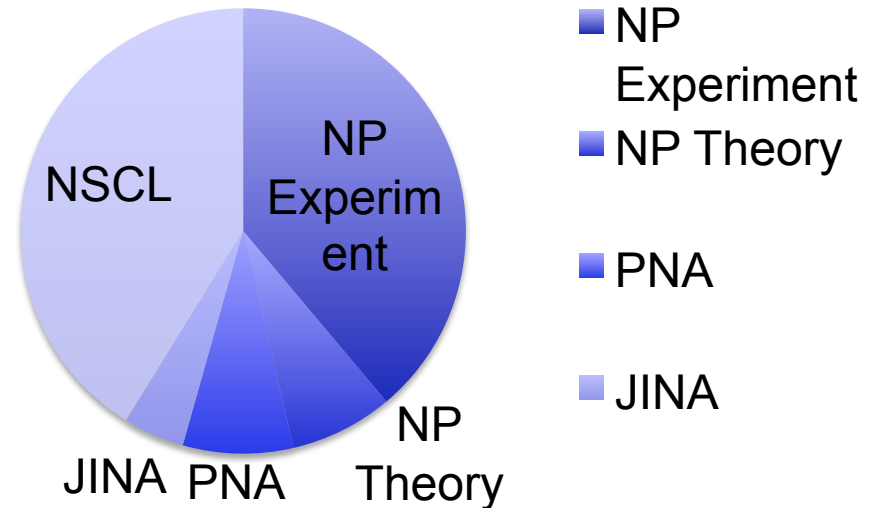
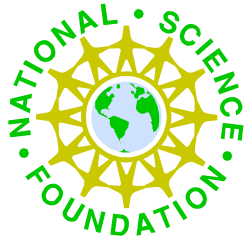


# Nuclear Physics at NSF

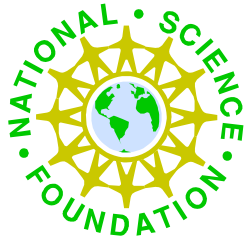
- NP Experiment
  - Structure
  - Heavy Ions
  - Symmetries
  - Hadrons and QCD
- NP Theory
- Particle and Nuclear Astrophysics
  - Astrophysics (Notre Dame, FSU)
  - Neutrinos (Borexino,  $\beta\beta$ ,  $\vartheta_{13}$ )
- Frontier Center (Joint Institute for Nuclear Astrophysics)
- NSCL
- FY2009 total: \$47M





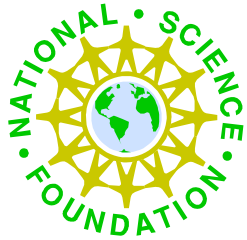
# Nuclear Physics at NSF FY2010 Summary

- FY2010 Appropriation
  - NP Experiment: approx. +4.3%
  - NP Theory: +9.2%
  - Particle and Nuclear Astrophysics: +5%
- Recovery Act
  - continue to smooth out ARRA “delta function”
  - fewer commitments from FY2009
  - make some 3-year awards in FY2010



# Additional Funding

- Major Research Instrumentation (MRI)
  - awards in process
- Cyber-Enabled Discovery and Innovation (CDI)
  - awards in process
- DHS Domestic Nuclear Detection Office
  - awards in process
- Software Infrastructure for Sustained Innovation (SI<sup>2</sup>)
  - awards in process
- Physics Frontiers Centers
  - **preproposal deadline: August 11, 2010**



# FY2011 R&RA Budget Request

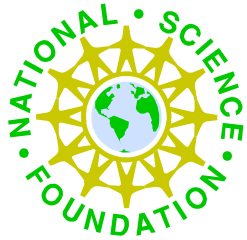
## R&RA Funding

(Dollars in Millions)

	FY 2009	FY 2009	FY 2010	FY 2011	Change over	
	Omnibus	ARRA			FY 2010 Estimate	FY 2011 Request
	Actual	Actual	Estimate	Request	Amount	Percent
Biological Sciences	\$656.62	\$260.00	\$714.54	\$767.81	\$53.27	7.5%
Computer & Information Science & Engineering	574.50	235.00	618.83	684.51	65.68	10.6%
Engineering	664.99	264.99	743.93	825.67	81.74	11.0%
Geosciences	808.53	347.00	889.64	955.29	65.65	7.4%
Mathematical & Physical Sciences	1,243.88	474.97	1,351.84	1,409.91	58.07	4.3%
Social, Behavioral & Economic Sciences	240.56	84.97	255.25	268.79	13.54	5.3%
Office of Cyberinfrastructure	199.23	80.00	214.28	228.07	13.79	6.4%
Office of International Science & Engineering	47.45	13.98	47.83	53.26	5.43	11.4%
Office of Polar Programs <sup>1</sup>	473.55	171.89	451.16	527.99	76.83	17.0%
Integrative Activities	241.58	129.85	275.04	295.93	20.89	7.6%
U.S. Arctic Research Commission	1.50	-	1.58	1.60	0.02	1.3%
<b>Total, R&amp;RA</b>	<b>\$5,152.39</b>	<b>\$2,062.64</b>	<b>\$5,563.92</b>	<b>\$6,018.83</b>	<b>\$454.91</b>	<b>8.2%</b>

Totals may not add due to rounding.

<sup>1</sup> Funding for FY 2010 excludes a one-time appropriation transfer of \$54.0 million to U.S. Coast Guard per P.L. 111-117.



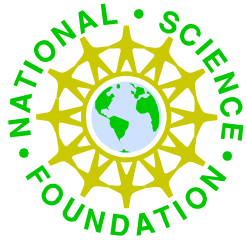
# FY2011 MPS Budget Request

## Mathematical and Physical Sciences (MPS) Funding

(Dollars in Millions)

	FY 2009	FY 2009	FY 2010 Estimate	FY 2011 Request	Change Over	
	Omnibus Actual	ARRA Actual			FY 2010 Estimate	FY 2010 Estimate Amount
Astronomical Sciences	\$228.67	\$85.80	\$245.69	\$251.77	\$6.08	2.5%
Chemistry <sup>1</sup>	211.67	87.36	233.73	247.56	13.83	5.9%
Materials Research	282.52	108.17	302.67	319.37	16.70	5.5%
Mathematical Sciences	224.84	97.34	241.38	253.46	12.08	5.0%
Physics	262.47	96.30	290.04	298.19	8.15	2.8%
Office of Multidisciplinary Activities	33.70	-	38.33	39.56	1.23	3.2%
<b>Total, MPS</b>	<b>\$1,243.88</b>	<b>\$474.97</b>	<b>\$1,351.84</b>	<b>\$1,409.91</b>	<b>\$58.07</b>	<b>4.3%</b>
Research	840.82	357.50	911.09	972.35	61.26	6.7%
Education	61.68	44.71	65.54	65.01	-0.53	-0.8%
Infrastructure <sup>1</sup>	322.58	72.76	353.73	349.10	-4.63	-1.3%
Stewardship	18.80	-	21.48	23.45	1.97	9.2%

Totals may not add due to rounding.

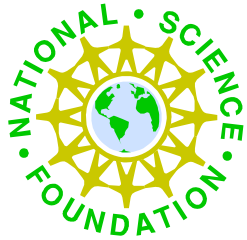


# FY2011 Physics Division Budget Request

## Physics (PHY) Funding

(Dollars in Millions)

	FY 2009	FY 2009	FY 2010	FY 2011	Change Over	
	Omnibus	ARRA			FY 2010	FY 2011
	Actual	Actual	Estimate	Request	Amount	Percent
<b>Total, PHY</b>	<b>\$262.47</b>	<b>\$96.30</b>	<b>\$290.04</b>	<b>\$298.19</b>	<b>\$8.15</b>	<b>2.8%</b>
Research	156.11	88.93	173.79	193.54	19.75	11.4%
<i>STC: Center for Biophotonics Science &amp; Eng.</i>	3.96	-	3.28	2.62	-0.66	-20.1%
<i>Nanoscale Sci. Eng. Centers</i>	2.40	-	2.40	1.14	-1.26	-52.5%
Education	6.91	4.08	9.42	10.61	1.19	12.6%
Infrastructure	95.47	3.29	102.65	89.30	-13.35	-13.0%
<i>Cornell High Ener. Synchr. Source (CHESS)/</i>	8.50	1.29	-	-	-	N/A
<i>Cornell Electron Storage Ring (CESR)</i>						
<i>Large Hadron Collider</i>	18.00	-	18.00	18.00	-	-
<i>Large Interfer. Grav. Wave Observatory (LIGO)</i>	30.30	-	28.50	30.30	1.80	6.3%
<i>Nat'l Superconducting Cyclotron Lab (NSCL)</i>	20.50	2.00	21.00	21.50	0.50	2.4%
<i>Ice Cube</i>	2.16	-	2.15	2.50	0.35	16.3%



# People

- **NSF Director: Subra Suresh (MIT, nominated)**
- **NSF Deputy Director: Cora Marrett (acting)**
- **MPS Assistant Director: Ed Seidel**
- **Physics Division Director: Joe Dehmer**
- **Nuclear Physics:**
  - **BDK (expt and theory)**
  - **Allena Opper: departs August 17**
  - **Kyungseon Joo (UConn): arrives August 2**