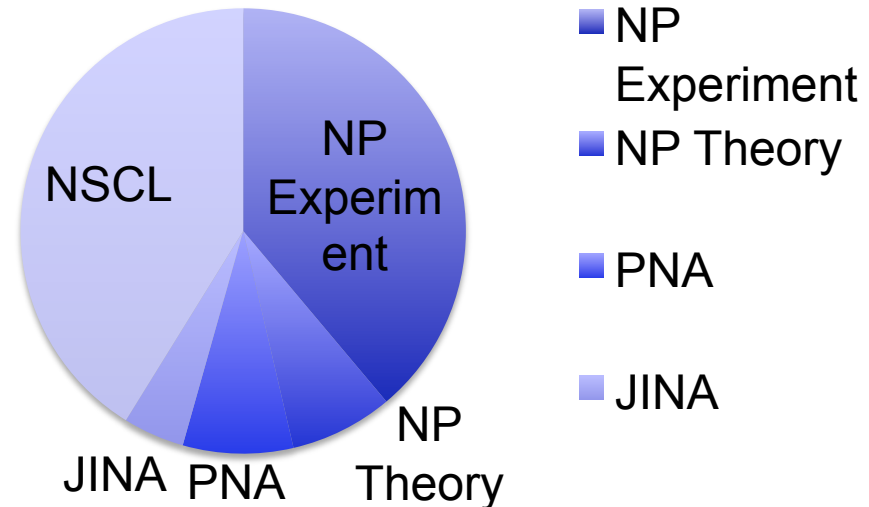
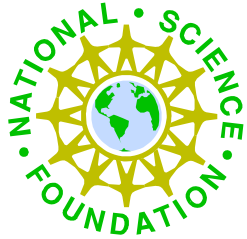


Nuclear Physics at NSF

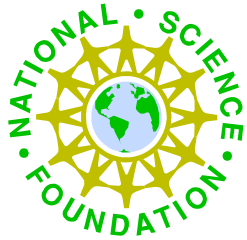
- NP Experiment
 - Structure
 - Heavy Ions
 - Symmetries
 - Hadrons and QCD
- NP Theory
- Particle and Nuclear Astrophysics
 - Astrophysics (Notre Dame, FSU)
 - Neutrinos (Borexino, $\beta\beta$, ϑ_{13})
- Frontier Center (Joint Institute for Nuclear Astrophysics)
- NSCL
- FY2009 total: \$47M





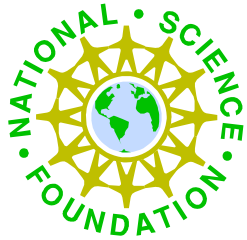
Nuclear Physics at NSF FY2010 Summary

- 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

- Physics Frontiers Centers
 - full proposal invitees selected
- Cyber-Enabled Discovery and Innovation (CDI)
 - Type I: January 19, 2011
 - Type II: January 20, 2011
- Major Research Instrumentation (MRI)
 - Catholic U, South Carolina, Mississippi State, Florida International: aerogel K detector for JLAB
 - Deadline for FY2011: January 27, 2011



FY2011 R&RA Budget Request

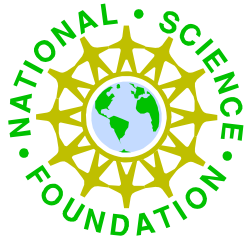
R&RA Funding (Dollars in Millions)

	FY 2009 Omnibus Actual	FY 2009 ARRA Actual	FY 2010 Estimate	FY 2011 Request	Change over FY 2010 Estimate	
					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	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%
Total, R&RA	\$5,152.39	\$2,062.64	\$5,563.92	\$6,018.83	\$454.91	8.2%

Totals may not add due to rounding.

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

House mark: 5,502; Senate mark: 5,492



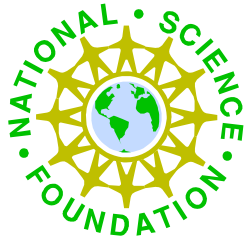
FY2011 MPS Budget Request

Mathematical and Physical Sciences (MPS) Funding (Dollars in Millions)

	FY 2009 Omnibus Actual	FY 2009 ARRA Actual	FY 2010 Estimate	FY 2011 Request	Change Over FY 2010 Estimate	
					Amount	Percent
Astronomical Sciences	\$228.67	\$85.80	\$245.69	\$251.77	\$6.08	2.5%
Chemistry ¹	211.67	87.36	233.73	247.56	13.83	5.9%
Materials Research	232.52	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%
Total, MPS	\$1,243.88	\$474.97	\$1,351.84	\$1,409.91	\$58.07	4.3%
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 ¹	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.

House mark: 1,396; Senate mark: 1,398

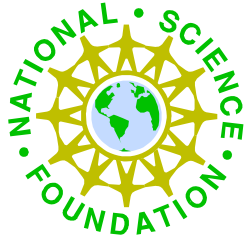


FY2011 Physics Division Budget Request

Physics (PHY) Funding

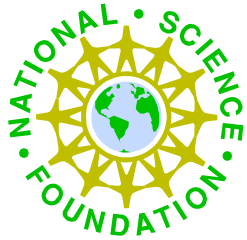
(Dollars in Millions)

	FY 2009	FY 2009	FY 2010 Estimate	FY 2011 Request	Change Over	
	OMB Actual	ARRA Actual			FY 2010 Estimate	FY 2011 Request
Total, PHY	\$262.47	\$96.30	\$290.04	\$298.19	\$8.15	2.8%
Research	156.11	88.93	173.79	193.54	19.75	11.4%
<i>STC: Center for Biophotonics Science & 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)/ Cornell Electron Storage Ring (CESR)</i>	8.50	1.29	-	-	-	N/A
<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%



NSF Required Supplementary Information

- **Postdoc Mentoring Plan**
 - **already in effect (from AMERICA COMPETES ACT)**
 - **1 page**
 - **Data Management Plan**
 - **implements Data Sharing Policy already in effect**
 - **effective January 18, 2011**
 - **up to 2 pages**
- both evaluated through merit review process*



People

- **NSF Director: Subra Suresh**
- **NSF Deputy Director: Cora Marrett (acting)**
- **MPS Assistant Director: H. E. Seidel**
- **Physics Division Director: Joe Dehmer**
- **Nuclear Physics:**
 - **BDK (expt and theory)**
 - **Kyungseon Joo (and astro, underground lab)**