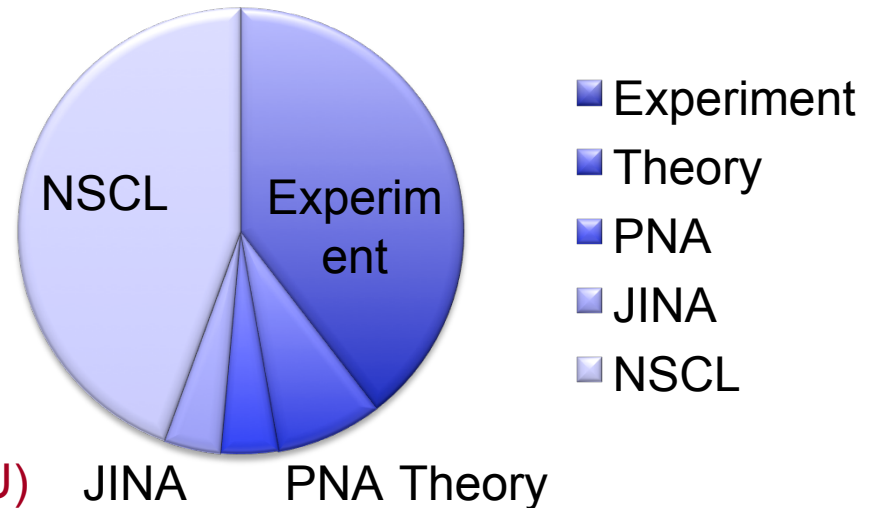
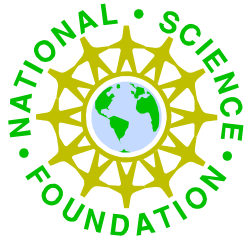


Nuclear Physics at NSF

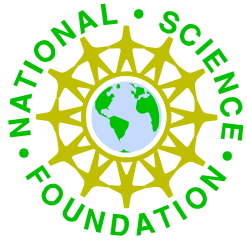
- NP Experiment
 - Structure
 - Heavy Ions
 - Symmetries
 - Hadrons and QCD
 - Astrophysics (Notre Dame, FSU)
- NP Theory
- Particle and Nuclear Astrophysics (PNA)
 - Neutrinos (Borexino, $\beta\beta$, θ_{13})
- Frontier Center (Joint Institute for Nuclear Astrophysics)
- NSCL
- FY2011 total: \$48.5M





FY2011 Status

- NSF appropriation: R&RA down 1%
- NP and most other programs down 3%
- continue managing ARRA funding impact from FY2009



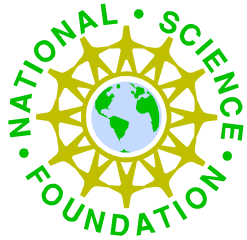
FY2012 R&RA Budget Request

R&RA Funding (Dollars in Millions)

	FY 2010 Omnibus Actual	FY 2010 ARRA Actual	FY 2010 Enacted/ Annualized FY 2011 CR ¹	FY 2012 Request	Change over FY 2010 Enacted Amount	Percent
Biological Sciences	\$714.77	\$0.35	\$714.54	\$794.49	\$79.95	11.2%
Computer & Information Science & Engineering	618.71	-	618.83	728.42	109.59	17.7%
Engineering	775.92	-	743.93	908.30	164.37	22.1%
Geosciences	891.87	0.40	889.64	979.16	89.52	10.1%
Mathematical & Physical Sciences	1,367.95	15.70	1,351.84	1,432.73	80.89	6.0%
Social, Behavioral & Economic Sciences	255.31	0.25	255.25	301.13	45.88	18.0%
Office of Cyberinfrastructure	214.72	-	214.28	236.02	21.74	10.1%
Office of International Science & Engineering	47.84	0.10	47.83	58.03	10.20	21.3%
Office of Polar Programs ²	451.77	2.23	451.16	477.41	26.25	5.8%
Integrative Activities	274.89	420.15	275.04	336.25	61.21	22.3%
U.S. Arctic Research Commission	1.58	-	1.58	1.60	0.02	1.3%
Total, R&RA	\$5,615.33	\$439.17	\$5,563.92	\$6,253.54	\$689.62	12.4%

Totals may not add due to rounding.

R&RA: House : \$5,609; Senate : \$5,443; Final: \$5,719 (+2.8%)



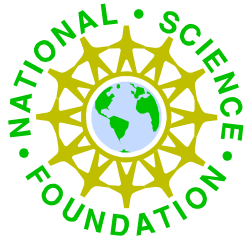
FY2012 MPS Budget Request

MPS Funding

(Dollars in Millions)

	FY 2010 Omnibus Actual	FY 2010 ARRA Actual	FY 2010 Enacted/ Annualized FY 2011 CR	FY 2012 Request	Change Over FY 2010 Enacted	
					Amount	Percent
Division of Astronomical Sciences (AST)	\$246.53	-	\$245.69	\$249.12	\$3.43	1.4%
Division of Chemistry (CHE)	233.68	15.70	233.73	258.07	24.34	10.4%
Division of Materials Research (DMR)	302.57	-	302.67	320.79	18.12	6.0%
Division of Mathematical Sciences (DMS)	244.92	-	241.38	260.43	19.05	7.9%
Division of Physics (PHY)	301.66	-	290.04	300.91	10.87	3.7%
Office of Multidisciplinary Activities (OMA)	38.58	-	38.33	43.41	5.08	13.3%
Total, MPS	\$1,367.95	\$15.70	\$1,351.84	\$1,432.73	\$80.89	6.0%

Totals may not add due to rounding.



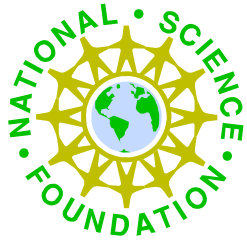
FY2012 Physics Division Budget Request

PHY Funding

(Dollars in Millions)

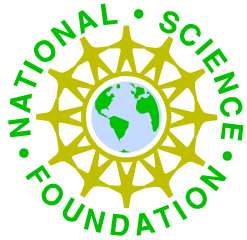
	FY 2010	FY 2010	FY 2012	Change Over	
	Omnibus	Enacted/ Annualized FY		FY 2010	FY 2010
	Actual	2011 CR	Request	Amount	Percent
PHY	\$301.66	\$290.04	\$300.91	\$10.87	3.7%
Research	178.72	177.97	214.12	36.15	20.3%
<i>CAREER</i>	8.76	5.60	7.43	1.83	32.7%
<i>Centers Funding (total)</i>	5.68	5.68	1.14	-4.54	-79.9%
<i>STC 2002: Cntr. For Bio. Sci.&Tech.</i>	3.28	3.28	-	-3.28	-100.0%
<i>Nanoscale Sci. and Eng. Ctrs.</i>	2.40	2.40	1.14	-1.26	-52.5%
Education	8.14	9.42	8.44	-0.98	-10.4%
Infrastructure	114.80	102.65	78.35	-24.30	-23.7%
<i>Large Hadron Collider (LHC)</i>	18.00	18.00	18.00	-	-
<i>Laser Inteferomter Grav. Wave Obs. (LIGO)</i>	28.50	28.50	30.40	1.90	6.7%
<i>Nat'l Superconducting Cyclotron Lab (NSCL)</i>	21.00	21.00	21.50	0.50	2.4%
<i>IceCube</i>	2.15	2.15	3.45	1.30	60.5%
<i>Pre-Construction Planning (total)</i>	40.69	29.00	-	-29.00	-100.0%
<i>Deep Underground Sci. & Engr. Lab (DUSEL)¹</i>	40.69	29.00	-	-29.00	-100.0%
<i>Research Resources</i>	4.47	5.00	5.00	-	-

¹ DUSEL FY 2010 Actual includes \$11.74 million in carryover funding from FY 2009.



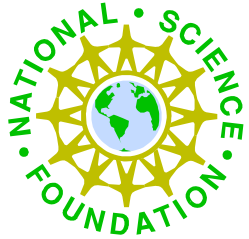
Additional Funding

- Physics Frontiers Centers
 - all 4 renewals awarded or in process
 - +1: Institute for Quantum Information and Matter (Caltech)
- Domestic Nuclear Detection Office (DNDO)
 - Duke and NCA&T: nuclear data measurements and detector development
- Major Research Instrumentation (MRI): \$729,000
 - UNF-FSU: neutron detector array
 - MSU: single-ion Penning Trap



Additional Funding: Future

- Major Research Instrumentation (MRI)
 - small (<\$1M); large (\$1-4M)
 - *FY2012 deadline: January 26, 2012*
- Petascale Computing Resource Allocations (PRAC)
 - testbed access for petascale code development
 - *FY2011 deadline: June 30, 2012*
- DHS Domestic Nuclear Detection Office
 - multi-year initiative begun FY2007
 - *FY2012 deadline: Spring 2012*



People

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