

**Office of Science**  
**Allocation of \$62,500,000 FY 2008 Emergency Supplemental Funding**

**Basic Energy Sciences (+\$13,500,000 over a prior FY 2008 appropriation<sup>1</sup> of \$1,269,902,000, for a revised total of \$1,283,402,000)**

**Synchrotron and Radiation Light Sources (+\$11,500,000 over a prior FY 2008 appropriation of \$220,092,000, for a revised total of \$231,592,000)**

- Synchrotron light source facilities help the research community extend basic knowledge and advance technology development in such areas as fiber and composite materials, microscopic machines, high-capacity magnetic data storage, and targeted pharmaceuticals for diagnosis and cure of major diseases. DOE synchrotron radiation light sources epitomize the contributions our Nation's government research facilities, both to our understanding of fundamental science and to the technological foundations of U.S. industry.

**Spallation Neutron Source (+\$2,000,000 over a prior FY 2008 appropriation of \$164,640,000, for a revised total of \$166,640,000)**

- Neutron scattering is a unique probe for application in many fields of science and technology. Virtually everything we know about the fundamental structure of magnetic materials—which lie at the heart of today's motors and generators, telecommunications, and video and audio technologies—has been learned through neutron scattering. Among other applications are biomolecular structure, polymer science, high-temperature superconductivity, the structure and dynamics of solids and liquids, and the engineering properties of structural materials.

**Fusion Energy Science (+\$15,500,000 over a prior FY 2008 appropriation of \$286,548,000, for a revised total of \$302,048,000)**

**ITER (+\$15,500,000 over a prior FY 2008 appropriation of \$10,626,000, for a revised total of \$26,126,000)**

- The highest priority of the Fusion Energy Sciences program is the U.S. ITER Project. SC has taken steps to continue our participation in the project by preserving the U.S. ITER core project team until additional funding can be made available.
- The funding provided in the supplemental will eliminate the need for furloughs and reductions in force resulting from the reduced level of funding in the FY 2008 appropriations for the U.S. Contributions to ITER project.

**High Energy Physics (+\$32,000,000 over a prior FY 2008 appropriation of \$689,331,000, for a revised total of \$721,331,000)**

- The highest priorities of the High Energy Physics program at this time are to preserve critical, highly trained workforce important for the on-going and future program and to allow work to proceed on the development of a world-class neutrino program at Fermilab.
- With supplement funding of \$32,000,000 for HEP:

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<sup>1</sup> All "prior FY 2008 appropriation" amounts are shown consistent with FY 2008 amounts as of the FY 2009 budget request to Congress in February, 2008. Small reallocations, including mandated transfers to the Small Business Innovation Research and Technology Transfer programs, have since been applied against many of these amounts.

- \$20,000,000 will be used to stop the planned involuntary layoffs, approximately 100 people at Fermilab and to sustain the Fermilab workforce during an anticipated up to 6-month continuing resolution;
  - \$9,500,000 will be used to develop the planned neutrino program at Fermilab (i.e.; allowing NOvA to proceed in a timely manner and initiating R&D and planning to implement the world-leading U.S. program recommended in the recent High Energy Physics Advisory Panel (P5) report); and
  - \$2,500,000 will be used to restore critical accelerator R&D and computing capabilities at Stanford Linear Accelerator Center that had been significantly diminished by the staff reductions necessitated by the original FY 2008 Appropriation.
- This supplemental funding stabilizes the research and operational staff at Fermilab and allows the high priority initiatives in neutrino physics at Fermilab to proceed, preserves important competencies and capabilities in accelerator physics at the Stanford Linear Accelerator Center, and allows of more rapid completion of the analysis for B-Factor data. We estimate that this action restores 100 positions at Fermilab, and 15 to 20 of the 75 people laid off at Stanford Linear Accelerator Center, all of whom otherwise were expected to have left the laboratories.

**Nuclear Physics (\$1,500,000 over a prior FY 2008 appropriation of \$432,726,000, for a revised total of \$434,226,000)**

**Relativistic Heavy Ion Collider (RHIC) Operations (+\$1,500,000 over a prior FY 2008 appropriation of \$136,034,000, for a revised total of \$137,534,000)**

- The Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory is the flagship facility of the Nuclear Physics program for studies of hot, dense nuclear matter.

**Office of Science Funding Summary**  
(dollars in thousands)

	FY 2008			FY 2009 Request to Congress	FY 2009 Request vs. FY 2008 Current Approp.	
	Prior Approp.	Supple- mental	Current Approp.			
Basic Energy Sciences	1,269,902	+13,500	1,283,402	1,568,160	+284,758	+22.2%
Advanced Scientific Computing Research	351,173	—	351,173	368,820	+17,647	+5.0%
Biological & Environmental Research	544,397	—	544,397	568,540	+24,143	+4.4%
High Energy Physics	689,331	+32,000	721,331	804,960	+83,629	+11.6%
Nuclear Physics	432,726	+1,500	434,226	510,080	+75,854	+17.5%
Fusion Energy Sciences	286,548	+15,500	302,048	493,050	+191,002	+63.2%
Other Science <sup>1</sup>	399,065	—	399,065	408,359	+9,294	+2.3%
<b>Total, Office of Science</b>	<b>3,973,142</b>	<b>+62,500</b>	<b>4,035,642</b>	<b>4,721,969</b>	<b>+686,327</b>	<b>+17.0%</b>

<sup>1</sup>“Other Science” includes Science Laboratories Infrastructure, Science Program Direction, Workforce Development for Teachers and Scientists, and Safeguards and Security; as well as (in FY 2008 only) Congressionally-directed projects, a rescission of a prior year Congressionally-directed project, an offset for Safeguards and Security expenses charged to reimbursable customers, and reductions for use of prior year balances.