



Division of Nuclear Physics

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Clearly our nation faces a challenge to reduce the budget deficit while at the same time creating jobs and securing our future economic prosperity. We appreciate that hard choices must be made by Congress to address this challenge and to find the right path to economic prosperity in the near term and to chart a course for success in the longer-term future.

The United States has long been the world leader in research in nuclear science, and has reaped the intellectual, economic, and practical benefits of this research. The close connection between fundamental research and economic strength has been well documented. Basic research into the physics of the atomic nucleus has laid a solid foundation for practical technologies such as nuclear energy, nuclear medicine, particle accelerators, detectors, and nuclear weapons. In the course of this basic research, moreover, nuclear scientists have created a host of tools and instruments that have themselves proved valuable in the marketplace. Along with scientific and technical breakthroughs, a critical part of the research activities of nuclear scientists is the education of the highly specialized workforce needed to sustain and advance applied nuclear technologies. Past strong support by Congress for research in nuclear science has been critical to our leadership in this key area and to the benefits the country has enjoyed from this leadership, and we are very grateful for this support by Congress.

Research in nuclear science in the United States is funded primarily by the Office of Nuclear Physics within the Office of Science at the Department of Energy and by the Physics Division at the National Science Foundation. These agencies support a number of individual investigators and groups at universities and laboratories, and they also have responsibility for large research facilities for nuclear science. These presently include the Relativistic Heavy Ion Collider at Brookhaven National Laboratory in New York, the Continuous Electron Beam Accelerator Facility at the Thomas Jefferson National Accelerator Facility in Virginia, the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University, and the ATLAS facility at Argonne National Laboratory in Illinois. These user-based facilities are open to a wide variety of researchers, and are the backbone of research in nuclear science in this country.

The President's request for FY2012 for Nuclear Physics at DOE includes an increase of 12% over FY2011 funding for this area, with the requested increase motivated almost entirely by the need to keep on track two important new capabilities for nuclear science research – the energy upgrade at the Thomas Jefferson National Accelerator Facility and the new Facility for Rare Isotope Beams (FRIB) at Michigan State University. Both of these projects are at a critical stage, and funding at significantly less than the planned profile would mean loss of jobs in those local areas, delays in completion of the projects, and increases in the Total Project Costs. **We strongly urge that Congress provide funding for the Office of Nuclear Physics at DOE in FY2012 that is as close as possible to the President's request.** We do understand that cuts in many areas are necessary for FY2012, but we hope that the special situation of these important new capabilities will be recognized. Cuts at this time would come back down the road as additional costs.

With sincere respect and appreciation for the support that has been provided over many years for research in nuclear science, **we urge that in these difficult times investments for the future in this important area remain strong both at the Department of Energy and at the National Science Foundation.**

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