Office of Science Financial Assistance Funding Opportunity Announcement DE-PS02-06ER06-22

Office of Nuclear Physics Outstanding Junior Investigator Program

The Office of Nuclear Physics of the Office of Science (SC), U.S. Department of Energy (DOE), invites grant applications for support under the Outstanding Junior Investigator (OJI) Program in nuclear physics. The purpose of this program is to support the development of individual research programs of outstanding scientists early in their careers. Applications should be from tenure-track faculty who are currently involved in experimental or theoretical nuclear physics research, the U.S Nuclear Data Program (USNDP) or accelerator physics research related to nuclear physics projects, and should be submitted through a U.S. academic institution. Applicants must be no more than ten (10) years beyond the Ph. D. at the deadline for the application.

This is the eighth year of an Outstanding Junior Investigator Program in Nuclear Physics. A principal goal of this program is to identify exceptionally talented nuclear physicists early in their academic careers and to facilitate the development of their research programs. The proposed research is expected to make an important contribution to the vigor of the U.S. Nuclear Physics program. Additional information on previous OJI awards can be found at http://www.sc.doe.gov/np/program/oji.html. See SUPPLEMENTARY INFORMATION section for additional information.

LETTER OF INTENT: September 19, 2006, 4:30 PM Eastern Time

A Letter of Intent comprising information on collaborators and a brief summary of the proposed research (one paragraph), is strongly encouraged (but not required) and should be submitted by September 19, 2006, directly to the Office of Nuclear Physics. The Letter of Intent, referencing Program Notice DE-PS02-06ER06-22, should be sent to Dr. Sidney A. Coon by e-mail: Sidney.A.Coon@science.doe.gov. Please include the phrase "OJI Letter-of-Intent" in the subject line of the e-mail.

APPLICATION DUE DATE: November 8, 2006, 8:00 pm Eastern Time

Applications must be submitted using <u>Grants.gov</u>, the Funding Opportunity Announcement can be found using the CFDA Number, 81.049 or the Funding Opportunity Announcement number, DE-PS02-06ER06-22. Applicants must follow the instructions and use the forms provided on Grants.gov.

PROGRAM MANAGER: Dr. Sidney A. Coon, Office of Nuclear Physics, SC-26.

PHONE: (301) 903-7878 **FAX:** (301) 903-3833 **E-Mail:** Sidney.A.Coon@science.doe.gov.

SUPPLEMENTARY INFORMATION:

Research Areas: OJI research applications should be clearly aligned with at least one of the following Office of Nuclear Physics long term performance measures, or to any of the areas identified in the most recent Nuclear Physics Long Range Plan, and be able to contribute to its overall progress:

- Make precision measurements of fundamental properties of the proton, neutron and simple nuclei for comparison with theoretical calculations to provide a quantitative understanding of their quark substructure.
- Recreate brief, tiny samples of hot, dense nuclear matter to search for the quark-gluon plasma and characterize its properties.
- Investigate new regions of nuclear structure, study interactions in nuclear matter like those occurring in neutron stars, and determine the reactions that created the nuclei of atomic elements inside stars and supernovae.
- Measure fundamental properties of neutrinos and fundamental symmetries by using neutrinos from the sun and nuclear reactors and by using radioactive decay measurements.
- Contribute to the theoretical understanding of any of the above.

Posted on the Office of Science Grants and Contracts Web Site August 4, 2006.