UNH Media Relations

NH Scientists Awarded DOE Grant For Fusion And Space Science Research

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DURHAM, N.H. -- A team of scientists at the University of New Hampshire and Dartmouth College has been awarded a $1.7 million grant from the federal Department of Energy (DOE) to establish a new center that will develop theoretical and computer simulation models for applications to controlled thermonuclear fusion and to the problems of turbulence and heating in the Sun's environment.

Amitava Bhattacharjee, Paul Professor of Space Science at the UNH Institute for the Study of Earth, Oceans, and Space (EOS), will serve as director of the Cluster for Integrated Computation and Analysis of Reconnection and Turbulence or CICART.

The proposal for CICART, led by Bhattacharjee, was ranked top in the nation in the competitive award process at the DOE Experimental Program to Stimulate Competitive Research (EPSCoR). This program supports basic research in a broad range of science and technology disciplines within DOE.

EPSCoR enhances funding opportunities in states that historically have had lower federal funding levels. Since New Hampshire became an EPSCoR state in 2004 more than $4.1 million has been awarded to support scientific research.

"The main premise of CICART is that some fundamental aspects of physics in fusion devices, smaller-scale laboratory experiments, and astrophysical plasmas can be viewed from a common perspective, and progress in any one of these interconnected fields is likely to lead to progress in others," says Bhattacharjee.

The principal participants of CICART constitute an interdisciplinary group, drawn from the communities of applied mathematics, astrophysics, computational physics, fluid dynamics, and plasma physics. The group includes faculty members, research scientists, and graduate students.

CICART will foster collaborations between scientists at UNH, Dartmouth College, and two DOE laboratories. "I am delighted by the collaboration between UNH and Dartmouth. This project will build on expertise at both universities and will position New Hampshire well for future opportunities," says Martin Wybourne, vice provost for research at Dartmouth.

The EPSCoR program in New Hampshire is served by a statewide committee chaired by John Aber, vice president for research at UNH, and is composed of academic and industry leaders, legislators, and state officials. "Our goal in the NH EPSCoR program is to leverage these federal grants as a foundation for technology-based economic development," Aber says.

For more information on the NH EPSCoR Program: http://unh.edu/news/pdf/NH_EPSCoR_one-pager_2007.pdf.