

# **NCCS Snapshot**

## **The Week of November 12, 2007**

**NATIONAL CENTER**  
FOR COMPUTATIONAL SCIENCES



Oak Ridge National Laboratory  
U.S. Department of Energy

# Beyond the Valley of Beta Stability

## *Researchers probe the nature of unstable nuclei*

- David Dean and a team of researchers are using the NCCS's Cray XT4 Jaguar supercomputer to probe the nature of unstable nuclei
- The team's work ultimately promises to help make nuclear power generation more stable and better understand the universe
- Dean discusses his work in upcoming issues of *Physics Today* and *SciDAC Review*

David Dean



*"We know what happens in stable nuclei pretty well—there are only 300 of them—but when you add neutrons to the nucleus, you isolate and amplify different aspects of the underlying interactions within the nucleus."*

David Dean, Oak Ridge National Laboratory physicist

# NCCS Researchers Chosen for Conference

- Bronson Messer and Richards Mills of the NCCS recently took part in the Young Engineering Scientists Symposium in Washington, DC
- The event, held from October 22–24 at the French Embassy, gathered 20 young scientists, 10 each from France and the United States, to brainstorm together for possible collaborative research projects



*"It was great to learn about new solver technology, especially avenues that aren't being explored in the U.S."*

**Bronson Messer, Oak Ridge National Laboratory**

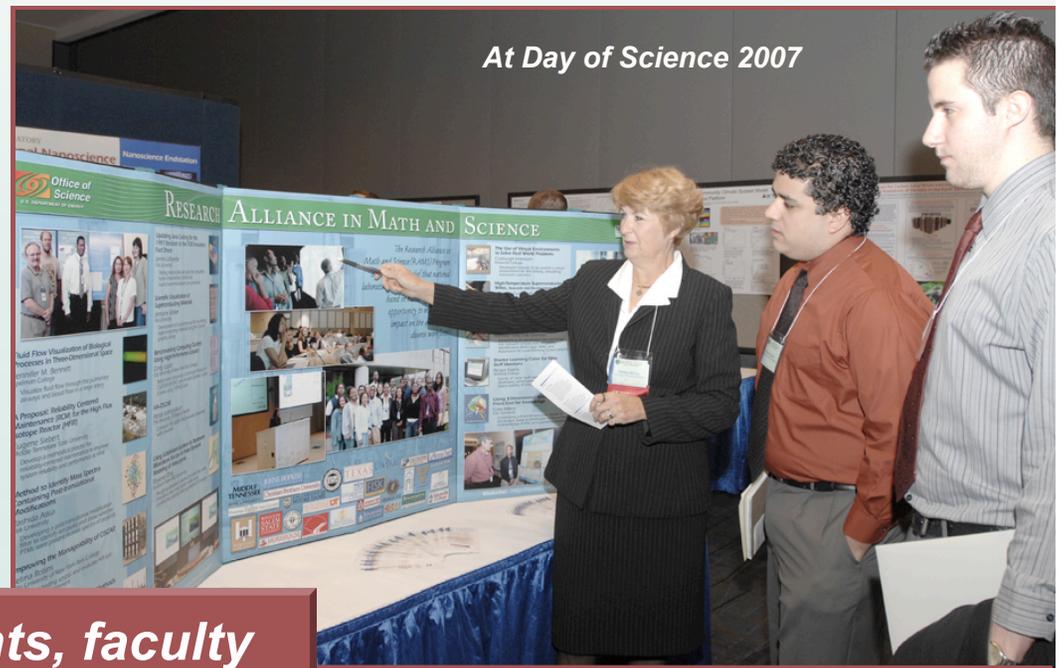
***Messer, Mills mull science with the French***

# Sixth Annual Day of Science Delivers

- Students from 125 colleges and universities descended on the Knoxville Convention Center on Monday, October 29, for the Sixth Annual Day of Science
- The DOE-sponsored event featured speakers and exhibits from government laboratories and universities aimed at recruiting the next generation of American scientists
- The event's overall attendance of more than 1,200 students and faculty was three times greater than any previous Day of Science

*"Some of the students participating in this event will be making the important scientific discoveries of tomorrow. ORNL is proud to be a major partner in encouraging them to pursue science careers."*

**Thom Mason, ORNL Director**



**DOE event draws 1,200 students, faculty**

# Lustre Workshop Held at NCCS

*System administrators learn tools, tricks*

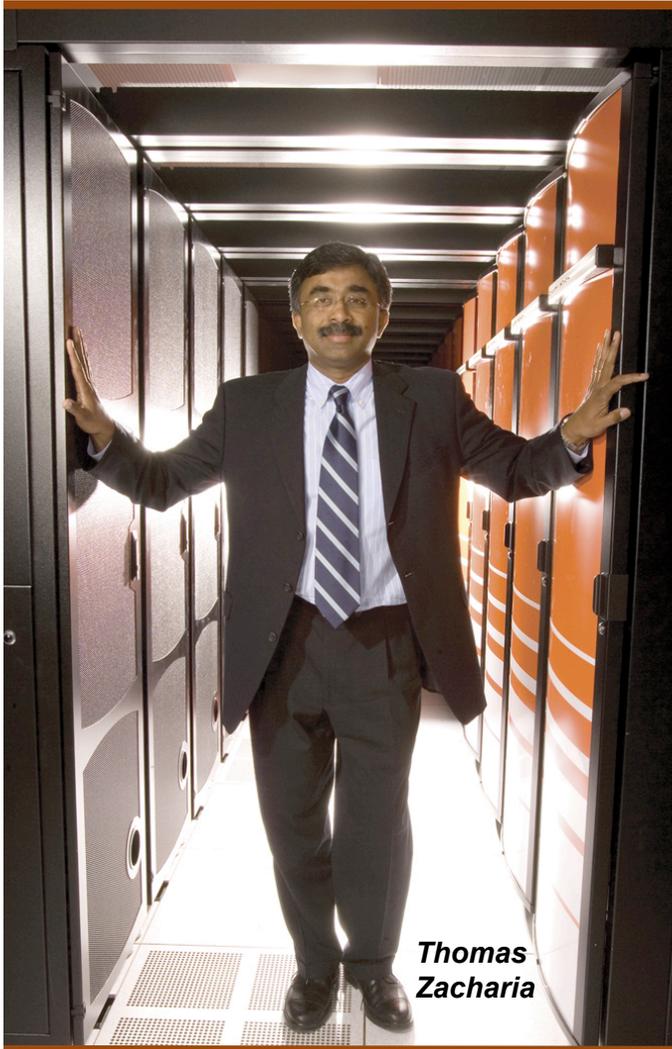
- ▶ **The National Center for Computational Sciences (NCCS) recently held a Lustre systems administration workshop at Oak Ridge National Laboratory**
- ▶ **Lustre is a highly scalable file system used on some of the world's fastest supercomputers, including the Jaguar system at the NCCS**



*"The workshop focused on a review of the Lustre file system and how it works, and specific details of tools and tricks system administrators can use."*

**Shane Canon, Oak Ridge National Laboratory**

# Zacharia Assumes New Role at UT



Thomas  
Zacharia

- **Associate Laboratory Director for Computing and Computational Sciences**  
Thomas Zacharia was recently named as the University of Tennessee's vice president of science and technology
- **Zacharia will work to integrate supercomputing into curriculum at UT campuses**

*"This additional role for Thomas represents a significant new milestone for UT-Battelle's management of the Laboratory and for the growing partnership between UT and ORNL."*

Oak Ridge National Laboratory Director Thom Mason

***Now UT vice president for science and technology***