May 2 – 9, 2009

ICCS Offers Free Tutorials Sunday, May 24
The ninth annual International Conference on Computational Science will take place in downtown Baton Rouge this May, and conference organizers will offer three free tutorials to kick off the event on Sunday, May 24.

The CCT is hosting this conference, which brings together scientific researchers from around the world to discuss the latest high-performance computing developments and breakthroughs. The conference in Baton Rouge will mark only the third time ICCS has taken place in the United States.

"ICCS 2009: Compute. Discover. Innovate." will take place May 25-27 at the Hilton Capitol Center, but the conference will have opening-day tutorials there on May 24. These tutorials are free, but participants must register for them in advance. Tutorial attendees do not need to pay full-conference registration to attend. Participants who plan to attend ICCS 2009 do not need to pay any additional fees to attend the tutorial sessions, but should register for those ahead of time.

The ICCS 2009 tutorials are:

• Parallel Performance Evaluation Tools for HPC Systems – this tutorial discusses cutting-edge developments for top high-performance computing, parallel and cluster systems, showing the potential of modern tools for program analysis.

This tutorial will last all day, from 8 a.m. – 5:30 p.m. Presenters are Allen D. Malony, University of Oregon; Markus Geimer, Jülich Supercomputing Centre; Andreas Knüpfer, Technical University Dresden; Rick Kufrin, NCSA/University of Illinois; and Shirley Moore, University of Tennessee.

• GPU Processors for Data Parallel Solutions for High-Performance Computation Research – this tutorial offers an introduction to data-parallel programming models for GPU (graphics processor unit) Computing using the CUDA architecture on NVIDIA GPUs.

This tutorial is presented through NVIDIA, and will take place from 8 a.m. until noon.

• Developing HPC Applications with the Cactus Framework -- this tutorial will describe how modern frameworks, such as the Cactus Computational Toolkit Framework,

can enable development for complex applications, allowing researchers to take advantage of new supercomputers and cyberinfrastructure.

This tutorial will take place from 1:30-5:30 p.m. Presenters are Erik Schnetter, Frank Loeffler and Eloisa Bentivegna, all from CCT.

For more information on ICCS 2009 tutorials, or to see a complete schedule of conference events, please visit http://www.iccs-meeting.org/iccs2009.

The University of Amsterdam and the University of Tennessee organize ICCS annually, with local organization in 2009 through the CCT.

CCT in the News:

- **Disney Grabs a Bigger Piece of Red Stick**

  Source: Animation World Network
  Joe Strike reports on Disney's increased presence at Red Stick, coinciding with the holiday release of the nearby New Orleans-themed Princess and the Frog.
  http://mag.awn.com/index.php?ltype=pageone&article_no=3973#

- **The young scientists**
  Source: 1012 Corridor
  Tevfik Kosar
  Louisiana State University, Baton Rouge
  http://www.1012corridor.com/news/2009/apr/29/young-scientists

Pats on the Back:

- Jintao Cui was a recipient of a student paper prize at the 2009 Society for Industrial and Applied Mathematics Southeast Atlantic Sectional (SIAM-SEAS) Meeting in Columbia, SC. His presentation was on "Nonconforming finite element methods for a two-dimensional curl-curl and grad-div problem."   Jintao is a graduate student in mathematics working with Susanne Brenner.

- Susanne Brenner has been selected to be an Overseas Visiting Professor at the State Key Laboratory of Scientific and Engineering Computing (LSEC) at the Chinese Academy of Science in Beijing. She will spend one month visiting LSEC later this year.

Upcoming Lectures:

- John W. Betz, from The MITRE Corporation, will be lecturing on "Advanced Satellite-Based Navigation" as a part of the IT Eminent Lecture Series on Wednesday, May 6. The lecture will be take place at 1:30 p.m. in Coates Hall, Room 145.

Please Note:

- This is the final week of the spring semester, and students will be completing their courses. If you have questions about student worker hours for the summer semester or time between semesters, please contact Brittany Juneau, bjuneau@cct.lsu.edu.

- ALL CCT meetings of the Spring 2009 semester will take place Wednesdays at 3 p.m. in Johnston 338. If you have any information, news or announcements you wish to include at the meeting, please notify Karen Jones, kjones@cct.lsu.edu. **The last ALL CCT meeting for this semester is scheduled for May 20.** Please make every effort to attend.

- Please note the three Cactus tutorials offered in the coming months. No prior knowledge of Cactus is required and materials from these tutorials will be available on the Cactus Web site.

  1.) May 24 in Baton Rouge, LA:
  A half-day tutorial for ICCS <http://www.iccs-meeting.org/> (International Conference on Computational Science) titled "Developing HPC Applications with the Cactus Framework". It will introduce the Cactus framework, how to write applications using Cactus, and how to use its adaptive mesh refinement infrastructure.

  Note that you can attend this tutorial without registering (and paying) for the conference, but you need to register for the tutorial itself.

  2.) May 27 in Baton Rouge, LA:
  A two-hour beginner's tutorial as part of the LSU/LONI HPC training courses, to be announced at <http://www.hpc.lsu.edu/training/>. It will introduce the Cactus framework and how to use it on the LSU/LONI HPC systems.

  3.) June 22 in Arlington, VA:
  A half-day tutorial as part of TeraGrid '09 <http://www.teragrid.org/tg09/index.php?option=com_content&task=view&id=55>. This will be a hands-on tutorial introducing Cactus, building applications, running simulations, and visualizing output.

- If you have any news for the CCT Weekly, please e-mail PR Manager Kristen Sunde directly at ksunde@cct.lsu.edu.

Upcoming Grant Deadlines:

Note: Please see the CCT deadline Web site, as many NSF deadlines are listed here:
http://www.cct.lsu.edu/about/grants/deadlines/events.php

- Petascale Computing Resource Allocations (PRAC)

  May 20 2009 10:00 am
  At Most $ 500,000.00 available
  http://www.nsf.gov/pubs/2008/nsf08529/nsf08529.htm

- Faculty Early Career Development (CAREER) Program

  July 22 2009 10:00 am
  At Most $ 400,000.00
  Full Proposal Deadlines by Discipline: July 21, 2009 - BIO, CISE, EHR July 22,
  2009 - ENG July 23, 2009
  http://www.nsf.gov/pubs/2008/nsf08557/nsf08557.htm

- Information and Intelligent Systems (IIS): Core Programs

  August 30 2009 10:00 am
  At Most $ 3,000,000.00 available
  http://www.nsf.gov/pubs/2009/nsf09557/nsf09557.htm?govDel=USNSF_25

- Computing and Communication Foundations (CCF): Core Programs

  August 30 2009 10:00 am
  At Most $ 3,000,000.00 available
  http://www.nsf.gov/pubs/2009/nsf09555/nsf09555.htm?govDel=USNSF_25

- CISE Cross-Cutting Programs: FY 2010

  August 30 2009 10:00 am
  At Least $ 3,000,000.00 available
  http://www.nsf.gov/pubs/2009/nsf09558/nsf09558.htm?govDel=USNSF_25