



November 23 – 29, 2008

Innovative University Research Highlighted at Supercomputing Conference 2008

CCT faculty, staff and students spent last week in Austin, Texas for Supercomputing 2008, the premier conference on computational science, supercomputing and its related applications. CCT hosted a booth at the conference to showcase University research that applies computational science in unique and dynamic ways to different areas of academia.

Some projects and research initiatives CCT highlighted included LONI and the LONI Institute, CyberTools, ParalleX, the AVATAR initiative and Louisiana's first-year achievements as a member of TeraGrid.

During Supercomputing 2008, CCT researchers Erik Schnetter and Steve Brandt conducted a 3-D simulation of two black holes colliding in a large-scale computing demonstration of the Cactus Computational Toolkit. This demonstration represented the largest number of processors ever used for a black hole visualization. They conducted this simulation on 5,832 cores using the Supercomputing Conference supercomputer, SICORTEX, and the demonstration ran at about a Teraflop of sustained computing power. This demo took place twice, in the CCT and SciCortex booths, during the show.

CCT plans to exhibit at Supercomputing 2009, which will take place next November in Portland, Oregon.

CCT in the News:

- **Protect Your Home and Maintain Your Lawn With LSU's Revolutionary AgBot**

Source: LSU Public Affairs

LSU Robotics Lab develops unique, multi-purpose robot for home use

Anyone who has ever spent a summer afternoon in the backyard spreading fertilizer and planting seeds knows lawn care is back-breaking work. It requires constant maintenance and a significant investment of time and money. But students in LSU's Department of Computer Science have developed a novel way to take the pain out of the perfect lawn: the fully customizable AgBot.

<http://www.lsu.edu/highlights/2008/11/agbot.html>

- **South Side grad has hand in animated film**

Source: The Journal Gazette

The first time South Side High School graduate Jason Maurer and his then-employer Mark Adler discussed making their own computer-animated feature was in 1995.

<http://www.journalgazette.net/apps/pbcs.dll/article?AID=/20081123/FEAT0108/811230340>

CCT Welcomes:

- Lukasz Lacinski, who is joining the High Performance Computing Group as an IT Analyst.

Pats On The Back:

- Congrats to Susanne Brenner! She has been reappointed to her second term as editor of the journal "Mathematics of Computation". She was appointed as an associate editor in 1993 and has served on this board continuously since then. Professor Brenner also accepted an invitation to join the editorial board of the journal "Advances in Numerical Analysis."

Upcoming Lectures:

- Robert M. Kirby will be speaking as a part of the Computational Mathematics Seminar Series on "Visualization of High Order Finite Element Methods" on Dec. 1 at 10:30 a.m. in Johnston 338. Kirby also will lecture on Dec. 2 at 2 p.m. in Johnston 338 on "Building Symbiotic Relationships Between Formal Verification and High Performance Computing."

Please Note:

- **Attention NERSC users:** The Luis W. Alvarez Fellowship in Computational Science allows recent graduates with a Ph.D. (or equivalent) with a strong emphasis on computing or computational science to acquire further scientific training at Berkeley Lab. The application deadline is December 2, 2008. See: <http://www.lbl.gov/CS/html/alvarez.html>
- If you plan to attend the CCT holiday lunch, please drop off cash or check (made out to Debra Waters) by this Wednesday, Nov. 26. Brittany Juneau in Johnston 218 will accept payments. Remember to select the meal you would like and whether you want dessert.
- CCT is accepting applications from high schools to attend the CyberTools Boot Camp (July 6-10, 2009). If you have worked with Louisiana high school students and know of a school, teacher or students who might be interested, please notify Kathy Traxler, ktraxler@cct.lsu.edu. More information about the camp is available online at: <http://www.cct.lsu.edu/CyberToolsCamp09>

- 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>

Cyber-Enabled Discovery and Innovation (CDI)

December 09 2008 10:00 am

A Portion Of \$ 26,000,000.00 available

http://www.nsf.gov/pubs/2008/nsf08604/nsf08604.htm?govDel=USNSF_25

Major Research Instrumentation Program (MRI)

January 19 2009 10:00 am

At Most \$ 4,000,000.00 available

http://www.nsf.gov/pubs/2009/nsf09502/nsf09502.htm?govDel=USNSF_25

Cyber-Physical Systems (CPS)

February 24 2009 10:00 am

At Most \$ 5,000,000.00 available

http://www.nsf.gov/pubs/2008/nsf08611/nsf08611.htm?govDel=USNSF_30