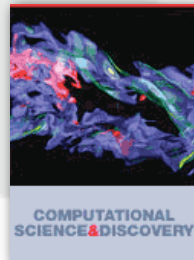


# ICL NEWSLETTER

March 2008

## Computational Science & Discovery Journal

IOP Publishing has launched a new peer reviewed journal in computational science to address the increasing salience of this ever growing discipline. The new journal, called *Computational Science & Discovery*, "focuses on scientific advances and discovery through computational science in physics, chemistry, biology and applied science." The journal is now inviting submissions for the inaugural issue. For more information about submitting a paper see the Invitation to Authors [pdf] or contact the journal at [csd@iop.org](mailto:csd@iop.org).



Anthony Mezzacappa from ORNL, who ICL previously collaborated with on the DOE Terascale Supernova Initiative (TSI), is the Editor-in-Chief.

## HPC Challenge Awards Competition at SC08

### HPC CHALLENGE

The goal of the competition is to focus the HPC community's attention on developing a broad set of HPC hardware and HPC software capabilities that are necessary to productively use HPC systems. The awards session will be held during the SC08 conference in Austin, TX November 15-21.

This is the third year for the competition, which focuses on four benchmarks from the HPC Challenge suite: Global HPL, Global Random Access, Triad, and Global FFT. The awards are \$750 for Best Performance and \$2000 for Most Productivity. Awards for Most Productivity will be weighted 50 percent on performance and 50 percent on code elegance, clarity, and size. Both award categories will be determined by an evaluation committee. The implementers must submit to [hpcc-awards@cs.utk.edu](mailto:hpcc-awards@cs.utk.edu) (by Oct. 24, 2008) a short description of the implementation, the performance achieved, lines-of-code, and the actual source code of their implementation. [More info]

## CLAPACK 3.1.1 Released

**Release date: February 19, 2008** CLAPACK is a translation of LAPACK in C done by the Fortran-to-C translator f2c. This release is an update to LAPACK 3.1.1.

Useful links: [CLAPACK website](#) Visual Studio solution for CLAPACK-3.1.1 [Download]  
[README](#) Prebuilt libraries for Windows [Download]  
[Linux build](#) [Download]

## Recent Conferences

**System Noise - Oak Ridge, TN** Feb 22  
George and Aurelien

**STCI - Oak Ridge, TN** Feb 25  
George

**PERI Meeting - San Diego, CA** Feb 25-26  
Dan, Heike, and Karl

**Symposium on Gene Golub's Legacy - Stanford** Feb 29-March 1  
Jack  
See Jack's tribute to Gene in [Computer Science Engineering](#)

**VI-HPS Tuning Workshop - Aachen, Germany**  
March 5-7  
Karl

## Upcoming Conferences

**MPI Forum - Chicago, IL** March 10-14  
George

**SIAM Conference on Parallel Processing for Scientific Computing - Atlanta, GA**  
March 12-14  
Dan, Jack, Jakub, Stan, Wes, Julien, and Marc

## People

### Visitors



March 2nd – March 11th

**Marc Baboulin** (ICL visitor June 2007-August 2007) is a post-doc at [CERFACS](#) but soon to be a Research Scientist at the [University of Coimbra](#) (Portugal) [Starting in April].



March 7th – March 11th

**Julien Langou** (ICL alumni 2003-2006) is an Assistant Professor at the [University of Colorado Denver](#).

### Departures



**Joe Thomas** is moving to Las Vegas but will continue working with us.



**Erika** has accepted a position with Microsoft. Congratulations!

## Tip of the Month from Tom Cortese



A while ago, I wanted to send about 60 Gb of raw camcorder footage, stored as maybe 40 or 50 video files on my Mac, to a friend who only has a Windows machine. I bought an external hard drive, thinking it would be a simple matter to copy the files and send it off in the mail.

Not true. If you format the drive with the Mac, then Windows won't recognize it. If you format the drive with Windows, the Mac will mount it, but only as a read-only file system (i.e., you could move from Windows to Mac, but not the other way).

Deep within the Mac disk utility are two reasonably well-hidden options: first select "MS DOS format", and then, before beginning the formatting process, change the partition type to "MBR" (Master Boot Record).

This will format the disk as FAT (there is no NTFS option), so it is not possible to transfer files larger than 2 Gb, so I still had to transfer a few using DVD-RW, but I was able to transfer about 60 Gb or so with minimal difficulty once I had this set up.

### Recent Lunch Talks

02-08-2008 **Hatem**  
Overview of PLASMA and Ongoing Work [[pdf](#)]

02-15-2008 **James McCombs**  
Multigrain Parallelism in Multimethod Solvers [[pdf](#)]

02-22-2008 **Lynne Parker**  
Sensor-based Fault Detection in Tightly-coupled Multi-robot Team Tasks [[pdf](#)]

02-27-2008 **Elisabeth Brunet**  
NewMadeleine: A Fast Communication Scheduling Engine for High Performance Networks [[pdf](#)]

2008-02-29 **Jakub**  
PLASMA: Parallel Linear Algebra Software for Multiprocessor Architectures [[pdf](#)]

2008-03-07 **Julien Langou**

### Upcoming Lunch Talks

2008-03-14 **Pierre Lemarinier**

2008-03-21 **Stan**

2008-03-28 **Yuanshun "Shaun" Dai**

2008-04-04 **Franck Cappello**

# Interview with Pierre Lemarinier

Research Associate

At ICL since January 2008



## Welcome to ICL, Pierre!

### Could you introduce yourself?

I am French. I was born in Caen, Normandy. I spent the last few months before coming to ICL looking after my child, Armand, born last September.

### Where did you graduate from?

I got my BS at the University of Caen before moving to Paris for my PhD I was a teaching assistant at the University of Paris XI, then a post-doc for the INRIA until last september.

### How did you hear about the Innovative Computing Laboratory? When did you first meet Jack? What made you want to work for ICL?

My PhD was related to the MPICH-V project, a study and comparison of automatic fault tolerance mechanisms for MPI applications, directed by Franck Cappello. I met Jack for the first time during SC03 in Phoenix. I also worked with George Bosilca during my MS internship before he joined ICL. The two MPI libraries we worked with for MPICH-V were MPICH and Open-MPI. Even if I was more involved in the MPICH counterpart of the project, I was still interested in Open-MPI.

### Is this your first work experience in the US? What is the most striking difference between US and France? Tennessee?

I worked for a month at Argonne National Lab. I was integrating a fault tolerant protocol in MPICH2. Both the French and US way of life have their pros and cons, but the differences are so great that it is hard to tell which difference is more eye opening at first glance. The main difference actually between Illinois and Tennessee is that it is warmer here in March than it is, even in May, in Chicago.

### On which project are you working at ICL?

I am working on Open-MPI, currently on the thread-safety aspect for the next release.

### Was your integration in the group easy?

I had absolutely no problem with integration. Of course, already knowing George and Aurelien, with whom I share an office, was certainly favorable. But even so, people here are really accessible and helpful.

### What are your occupations/hobbies outside work?

I like to ride my motorcycle, even if the wide straight roads in the US are not as fun as the little curved roads of my home country. My main occupation at the moment remains the great time-consuming activity of caring for my child.

### Tell us something about yourself that might surprise everyone.

I do not know if it is really surprising, but I practiced French boxing (Savate) the last five years. I think it is convenient to clear your mind; you can not easily continue to think about research problems when you get punched!

## Holiday Celebration

The ICL Winter Reception took place on February 7 at the BridgeView Grill on Neyland Drive.



## Reminders

- March 14 – 20** UT Spring Break
- March 21** Spring Recess - University is closed
- March 23** Easter Sunday

## Upcoming E-mail Changes

CS email server migration [[more info](#)]