

## CIG at the AGU FALL MEETING

Please note we will be holding the CIG Business Meeting on **Tuesday, December 6th, 2011 at the Parc 55 hotel (Market Street Room, 3rd floor)**. As usual, we will open with light passed hors d'oeuvres at 6:00 pm, before commencing with the meeting at 6:30 pm. We welcome all members of the Geophysical Community to attend.

CIG will also be ramping up its activities at the AGU. We have been invited by the National Science Foundation to join the NSF Street booth group, and you can find us at Booth 1127 (off the Howard Street side). We will be having a video display, so if you have some CIG research you would like to present – perhaps a demo or visualization – please let us know at [ariel-at-geodynamics.org](mailto:ariel-at-geodynamics.org). We'd love to showcase our codes in real-case situations.

In addition, the following two AGU sessions run by CIG members should be of particular interest to the Community:

- IN34 Robust Methods and Software for Multiphysics Simulation [IN34 Session](#)
- IN34 focuses, in particular, on discretization, solvers and implementation for multiphysics problems in geosciences.
- DI02: Advances in Computational Modelling in Geoscience [DI02 Session](#)
- DI02's focus is on new techniques and applications in large-scale computational geosciences, and on derivative-based inversion methods.

## Upcoming Tutorials:

CIG will be conducting a GALE/Underworld Tutorial Session at the Fall GSA meeting in Minneapolis, MN.

**F G 513. Gale/Underworld Framework Tutorial.** *Sat., 8 Oct., 8 a.m.–5 p.m.* FREE; includes continental breakfast and lunch. Limit: 50. CEU: 0.9. Cosponsor: Computational Infrastructure for Geodynamics. Louis Moresi, Monash Univ.; Patrice Rey, Univ. of Sydney; Walter Landry, CIG/Caltech.

Gale/Underworld is an open-source 2-D and 3-D parallel code for modeling long-term tectonic problems, including orogenesis, rifting, subduction, and heat flow. Participants will learn to install and run Gale/Underworld. The tutorial is aimed at researchers who have not previously used Gale/Underworld. It will cover the code's capabilities, including the variety of boundary conditions, constitutive laws, and initial conditions implemented. Tutorial participants will be introduced to its use on the NSF TeraGrid, where the code is preinstalled. Gale/Underworld is developed and supported by the Computational Infrastructure for Geodynamics, an NSF-funded membership-governed organization.

Attendees will need to bring laptop computers.

Early registration deadline: 6 September Registration after 6 September costs an additional \$30

You do not need to attend the full meeting - There is a meeting nonregistrant fee (\$40 by 6 Sept.) to be added to the course enrollment cost (the CIG tutorial is free, so you would only pay the \$40 to GSA). More information can be found above.

## Elections:

We are soliciting interested candidates for the upcoming vacancies to the Executive Committee and Science Steering Committees. If you would like to recommend a candidate, or put your own name forward, please send your information to the Nominations Committee, at [nominations-at-geodynamics.org](mailto:nominations-at-geodynamics.org). Carolina Lithgow-Bertelloni (Chair), Bruce Buffett, Marc Parmentier, members.

The deadline for suggesting candidates is September 7, 2011.

## New Staff

We would like to introduce a new member of the CIG staff, computer scientist Eric Heien. Eric comes to CIG with a Ph.D. in Computer Science from Osaka University, a B.S. in Computer Science from UC Berkeley, and a background in optimization of parallel computing simulations in biophysical and geophysical simulations.

Eric will attend the AGU meeting in December, where he will have a chance to meet many of you in person.

## CODE RELEASES

The PyLith team is pleased to announce the release of PyLith 1.6.1, a finite-element code designed to solve dynamic elastic problems and quasi-static viscoelastic problems in tectonic deformation. This release fixes a few bugs in PyLith v1.6.0 and includes small updates to the manual and examples. We strongly recommend all users of previous PyLith releases switch to this latest release.

**IMPORTANT NOTE:** Version 1.6.1 imposes stricter requirements on descriptive labels for spatial databases and friction models. In previous versions the default values (empty strings) were allowed. Users are now required to specify these values as empty strings are no longer allowed. This results in much better error messages.

You can download the source code and binaries from the software pages

## Portals

NSF has announced that after 10 years of service to the scientific community, the TeraGrid project has come to an end. It is succeeded by a new National Science Foundation program called XSEDE, the Extreme Science and Engineering Digital Environment. See [XSEDE](#) for information.

CIG has long had an allocation and software installed on TeraGrid computers. XSEDE has migrated those to its new computers. This transition should be transparent to users of the CIG TeraGrid allocation.

We are pleased to announce the availability of the Specfem 3D Globe Web Portal running on Ranger, the 62,976 core supercomputer at the Texas Advanced Computing Center. The portal provides automated, on-demand 3D seismic simulations and returns synthetic seismograms to the user.

If you have any questions, comments, or concerns, please send a message to *cig-help at geodynamics.org*.

If you wish to access the Community Software Area Allocation to work directly with other CIG codes such as Citcom, please fill out an application at: Allocation Application

If you are an institution that wishes to join CIG as a Community Member, please fill out an application at: CIG membership [application](#)

### **CIG Website:**

We are looking for ways to build more connections between members of the CIG community. One idea we would like feedback on is to have a page of links (by code) to recent papers, so that others who are interested in CIG code can view what problems are being tackled, and community members can publicize their research. If you would be interested in participating, please contact me at *ariel-at-geodynamics.org*.