Software development and releases

CIG Software Releases

1. GALE Alpha Release v. 0.1.0. GALE, (Arbitrary Lagrangian Eulerian) software for the long-term tectonics community, is now available as an alpha release. The code solves problems related to orogenesis, rifting, and subduction with coupling to surface erosion models. More information

2. LithoMop Alpha Release v. 0.7.2. LithoMop is a finite element code for the solution of visco-elastic/plastic deformation that was designed for lithospheric modeling problems. This release is a complete revision of an earlier code named Tecton that was rewritten to incorporate Python/Pyre. This release includes a new build procedure for easier installation on uniprocessor workstations. More information

Non-CIG Software Releases

1. ellipsis3d Release v 1.0.0. ellipsis3d is a three-dimensional version of the particle-in-cell finite element code ellipsis, a solid modeling code used to simulate visco-elastoplastic materials. The particle-in-cell method combines the strengths of the Lagrangian and Eulerian formulations of mechanics while bypassing their limitations. More information

Other Software News

- CIG Development Priorities. CIG posts its latest development priorities on the Geodynamics.org website. This feature provides information about the availability of new software with our best estimate of release dates. More information
- Input Sought for Strategic Plan. The CIG Science Steering Committee (SSC) has begun work on updating the CIG Strategic Plan. Please submit suggestions for the new plan to the members of the SSC before their May 18-19 meeting in Pasadena. The current strategic plan and a list of SSC members

Workshop Report

1. Summary Report for the 2006 Purdue Workshop for Compressible Mantle Convection. A report in now available from the March 27-28 workshop, including accomplishments, planned activities and recommendations to CIG. Members of the community are invited to login and comment via the website. Also, all the workshop presentations are available on the website as PDF files. More information

Workshops and Training Sessions

1. June 26-30. Fault Systems and Tectonic Modeling, co-sponsored by SCEC, NASA, NSF and CIG. The focus will be on the science associated with simulating pre- and post-seismic crustal deformation and training researchers in the use and customization of PyLith and GeoFest, a JPL code for crustal deformation. Golden, Colorado on the campus of the Colorado School of Mines. Please contact: Mark Simons or Carl Gable. Discounted hotel registration ends May 25. Register here
2. Fall 2006. Scientific Computing Workshop. The workshop, designed to bring together mathematicians, computational scientists and geoscientists, will address meshing, solvers, graphics, and other common issues in computational geophysics. Austin, Texas. Wolfgang Bangerth or Omar Ghattas
4. July 16-Aug 04. CIDER Workshop. CIG training session for mantle dynamics to be held as part of the CIDER workshop to be held at the Kavli Institute of Theoretical Physics in Santa Barbara. Please contact: Peter van Keken
5. August 2006. Magma Migration Workshop. The workshop addresses community needs and priorities for software development in magma dynamics. LDEO, Columbia University, New York. Please contact: Marc Spiegelman or Laurent Montesi
6. August 5-12. GALE Training. A training session for GALE will be held as part of the ISES summer program at Colorado College in Colorado Springs. For GALE-specific information, please contact: Walter Landry. More information
7. October 16-17. Scientific Computing Workshop. The workshop, designed to bring together mathematicians, computational scientists and geoscientists, will address meshing, solvers, graphics, and other common issues in computational geophysics. Austin, Texas. Please contact members of the steering committee: Wolfgang Bangerth, Omar Ghattas, or Brad Aagaard.
8. Fall 2006. Imaging Science and CIG Computational Seismology Workshop. Please contact: Alan Levander More information

Committees, Staff, Etc.

Request for Nominations. A nominating committee including Bill Appelbe, Wolfgang Bangerth and Carolina Lithgow-Bertelloni has been charged with finding candidates to fill the upcoming openings on the CIG Science Steering Committee (2) and the CIG Executive Committee (1). Please send your nomination suggestions and other recommendations to the committee

New CIG Institutional Members. CIG welcomes its newest Institutional Members, the Colorado School of Mines, Cornell University, and the State University of New York at Buffalo. In addition the CIG has a new Foreign Affiliate, the University of Science and Technology of China. A complete list of Institutional Members and Foreign affiliates.

Institutional Member Representative Rotation. Existing Institutional Members with more than one researcher involved with CIG should consider switching representatives from time to time to ensure a healthy balance of input and decision making. If your institution would like to change member representatives, please send an e-mail to .

New Staff. Eh Tan, who will receive his PhD in geophysics from Caltech this spring, will be joining CIG as a software developer in July.

CIG currently has an opening for a software engineer. More information

Who to contact

CIG Administration, contracts, travel, etc. Ariel Shoresh: (626) 395-1699
Equation solvers (PETSc) & PyLith development. Matt Kepley
SVN software repository & GALE development. Walter Landry: (626) 395-4621
Benchmark problems, visualization & CitCom. Luis Armendariz: (626) 395-1695
Build procedure & computational seismology. Leif Strand: (626) 395-1697
Web site and user manuals: Cassie Ferguson: (626) 395-1694
Software architecture & Pyre framework Michael Aivazis: (626) 395-1696
Administration: Mike Gurnis: (626) 395-1698

Science Steering Committee, contact Chairman Marc Parmentier (Brown U.)
Executive Committee, contact Chairman Mark Richards (Berkeley)