CIG Software Releases

- Conman 2.0 ConMan is a vectorized finite element program for the solution of the equations of incompressible, infinite-Prandtl number convection in two dimensions, originally written by Arthur Raefsky, Scott King, and Brad Hager. See ConMan for source code and
- SNAC 1.0 SNAC (StGermaiN Analysis of Continua) is an updated Lagrangian explicit finite difference code for modeling a finitely deforming elasto-visco-plastic solid in 3D, released under the GNU General Public License. See SNAC for source code and manual.

Software Bug Fix

• PyLith 1.3.1- PyLith is a finite element code for the solution of visco-elastic/plastic deformation that was designed for lithospheric modeling problems. The latest version is primarily a bugfix release. Two new minor features that were added include the addition of stages to PETSc logging to collect event logging in groups and the ability to set the minimum shear wave speed in SCEC CVM-H queries. Bug fixes include honoring partitioning options (which were ignored in v1.3.0); assembling of the Jacobian, residual, and fault sections across partitions (which caused errors in the computation of the change in tractions over the fault surface and errors while time-stepping in parallel); and omission of closing the fault material property databases (which resulted in memory not being deallocated). See PyLith for source code, binaries, and manual.

CIG Encourages Member Proposals to NSF; Solicits Feedback on CIG-II

• CIG recently sent out a letter detailing plans for continuing its activities beyond the end of current funding and encouraging members of the community to collaborate with computational scientists and seek funding from some relatively new NSF programs. We also want your feedback; read the Open Letter to the Community and click the Comments button at the end to provide your input.

CIG is Seeking CIG-Enabled One-Pagers, Journal Articles

• In preparation for the next phase of CIG, we are beginning a self-evaluation to understand the range of activities and impact of CIG. As a useful mechanism (and a very nice way to highlight your own science), we are seeking bibliographic information and/or electronic copies of "One-Pagers" (that briefly describe an exciting piece of your science that was made possible using CIG software or resources) or any published, in-press, or planned journal article or other publication that has been enabled by CIG or is contributing to the overall CIG effort. More details, an example one-pager, and forms for submitting your publication are at CIG-Related Publication Submission.

Upcoming Meetings

- CIG Business Meeting, Tuesday, December 16 (during AGU), 6-8:30 p.m., Parc 55 Hotel, Sienna Room (3rd Floor), San Francisco. You are invited to this public forum for members of the Geosciences community to discuss the future development of CIG. Expect the main focus to be on plans for the future, including proposals for CIG-II. Meeting follows reception. Details at CIG Business Meeting.
- Future of CIG Meeting, to be held in Spring 2009 (exact date TBA), Pasadena, CA. You are invited to this multiple-day meeting to discuss the future development of CIG. More details will be forthcoming as plans are finalized.

Presentations and Posters from GeoMath08 Workshop Online

• CIG Workshop on Mathematical and Computational Issues in the Solid Earth Geosciences, Sept. 15-17, 2008, Santa Fe, NM. This CIG workshop brought together solid-earth geoscientists, mathematicians, computational and computer scientists to focus on specific issues arising from a range of solid-Earth dynamics problems that have proven both difficult and critical for progress in studying and modeling the dynamics of the planet. The Workshop Agenda now includes links to all the presentations and posters given at the workshop.

EC and SSC Committee Updates

New EC and SSC Members - We are pleased to announce that the following people will be CIG's new officers filling 3-year terms:

- EC: Bill Appelbe (VPAC)
- SSC: Luc Lavier (U Texas at Austin), Andy Freed (Purdue), and Wolfgang Bangerth (reelected)

In addition, SSC members elected Louise Kellogg (UC Davis) as their new chair.

We would also like to thank the outgoing members of the EC and SSC for their exemplary service and contributions to CIG. Brad Hager served for two years on the EC, most recently serving as vice-chair and chair of the nominations committee and provided critical guidance during this time. Brad Aagaard has worked tirelessly in his three years on the SSC, most recently as chair for the past year. We are indebted to his vision and leadership. He has (and will continue) to provide fundamental contributions to short-term tectonics and the larger CFEM community as a major developer of PyLith. Finally, we will miss Shijie Zhong who also served three years on the SSC and has provided critical leadership to the mantle convection community through organization of mantle convection workshops and in particular, his fundamental contributions to Citcom and CitcomS. We look forward to continuing to work with Brad, Brad and Shijie as CIG plans for the future.

Committees, Staff, Etc.

CIG Administration, contracts, travel, etc.: Ariel Shoresh, (626) 395-1699,

Equation solvers (PETSc) and PyLith development: Matt Knepley,

Gale and Magma development: Walter Landry, (626) 395-4621,

Benchmarking, Cigma, and visualization: Luis Armendariz, (626) 395-1695,

Build procedure and computational seismology: Leif Strand, (626) 395-1697,

Citcom and Mantle convection benchmarks: Eh Tan, (626) 395-1693,
Website and user manuals: Sue Kientz, (626) 395-1694,
SVN software repository and systems administration: Jan Lindheim,
Software architecture and Pyre framework: Michael Aivazis, (626) 395-1696,
Administration: Mike Gurnis, (626) 395-1698,
Science Steering Committee: contact Chair Louise Kellogg (UC Davis),
Executive Committee: contact Chair Marc Spiegelman (Columbia),