

2014-2015 Work Plans

Work Plan 2014-2015

IMMEDIATE, URGENT GOALS

Software Development

- Continue PyLith development (see CIG PyLith Notes)
- Establish interaction with the Seismology Working Group on meshing issues

Community Activities

- Provide training via virtual workshops
- Continue development of a PyLith wiki to complement the cig-short email list and PyLith manual.
- Continue series of in-person workshops on biannual basis (even years).

IMMEDIATE GOALS

Software Development

Inversion framework for geodetic, seismic, and combined inversions.

RESEARCH QUESTIONS

Regionally constrained and internally consistent physics for the entire seismic cycle

Regionally constrained and internally consistent physics for tectonics of magmatic systems, geothermal systems, the cryosphere, and induced seismicity from fluid injection

Regionally constrained modeling of crustal deformation associated with surface loads

[Modeling Workshop](#), June 17-24, Stanford University. This onsite workshop was combined with an online session prior to the workshop. During the workshop advanced tutorials covered !Pylith, Cubit/Trelis and topics focused on post-seismic deformation and stress and strain in the lithosphere over the earthquake cycle. More information can be found under the conference website.

Release 2.0. This release replaced the C++ Sieve implementation of finite-element data structures with

ation, which provides tighter integration with other PETSc data structures. This also reduced memory
ved memory balancing while providing speed improvements in some parts of the code. During the
lease, the source repository migrated from Subversion to Git.