

**EARTH RESOURCES LABORATORY
FOUNDING MEMBER CONSORTIUM MEETING
INTEGRATED RESERVOIR SCIENCE**

**June 2-3, 2009
Room 6-120, MIT**

FINAL AGENDA

Tuesday June 2, 2009

8:00 am Registration and continental breakfast
8:30 Welcome and Opening Remarks – R. van der Hilst

Session 1: *Rock Properties: Pore Scale Physics and Borehole Acoustics (F.D. Morgan)*

8:45 Pore Scale Modeling of Rock Properties and Comparison to Laboratory Measurements– X. Zhan
9:15 Coupled seismic and flow modeling at pore scales – Y. Zhang
9:45 Time dependent diffusion – L. Schwartz

10:15 Break

10:30 SPH modeling of porous media – D. Holmes, J. Williams, P. Tilke
11:00 Asymmetric source acoustic LWD for improved Vs estimation – T.Chen

Session 2: *Student Introductions (A. Malcolm)*

11:30 Short introductions of ERL students and their research interests

12:00 pm Lunch (catered)

Session 3: *Reservoir Imaging: Hydrofractures and Beyond (M. Fehler)*

1:00 Improved methods for event detection in hydrofrac monitoring – F. Song
1:30 Moment tensor inversion of induced seismic events – J. Li
2:00 4D VSP imaging of hydrofracs – M. Willis

2:30 Break

3:00 Imaging with multiples – A. Malcolm
3:30 SEG advanced modeling project – M. Fehler

Session 4: *Other Reservoir Applications (R. van der Hilst)*

4:00 Methane hydrates – C. Ruppel
4:30 Geothermal reservoirs – M. Fehler

5:00 pm Adjourn

6:00 Reception and Dinner (R&D Pub, 4th Floor of the Stata Center)

Wednesday June 3, 2009

8:00 am Registration and continental breakfast

Session 5: Reservoir Imaging: Passive Seismics and Interferometry (R. van der Hilst)

8:30 Interferometric characterization of the near surface – P. Gouedard

9:00 Surface wave tomography from ambient noise – H. Yao

9:30 Interferometric correlogram-space analysis – O. Poliannikov

10:00 Three-dimensional passive seismic imaging around the SAFOD site, California, using the generalized radon transform– H. Zhang

10:30 Break

Session 6: Reservoir Production: Control, Geomechanics, and Monitoring (B. Hager)

10:45 Data assimilation methods for flow control in instrumental oil fields – D. McLaughlin

11:15 Sequential methods for coupled geomechanics/fluid flow simulation – R. Juanes

11:45 GPS/InSAR monitoring of reservoir production/geomechanical models – B. Hager

12:15 pm Lunch – Business Meeting – Faculty Club

2:00 pm Adjourn