AGENDA – ROSE meeting 23-24 April 2007

location: P13 in PTS1, S.P. Andersens veg 15, Trondheim.

Monday 23rd April

Session 1: Imaging and inversion
Chair:

12:00 LUNCH

12:45 Welcome
13:00 On the accuracy of spectral element methods for acoustic and elastic wave propagation, Saulo Pomponet, Universidade Federal da Bahia, Salvador, Brazil.
13:25 3-D acoustic Green’s function modeling in multilayered overburden, Milana Ayzenberg, NTNU.
13:45 Improved geometrical spreading approximations for horizontally layered VTI media, Alexey Stovas, NTNU.
14:05 Automatic non-hyperbolic velocity analysis in VTI-media, Brahim Abbad, NTNU/SINTEF.
14:25 Nonlinear least square inversion of reflection coefficients using Bayesian regularization, Tor Erik Rabben, NTNU.

14:45 Coffee break

15:15 Zero-offset seismic amplitude decomposition and migration, Bjørn Ursin, NTNU.
15:35 Wavefield decomposition and migration of marine seismic data, Ørjan Pedersen, NTNU.
15:55 2D anisotropic stereotomography with co-depthing of PP and PS reflections, Steinar Nag, NTNU/SINTEF.
16:15 Adaptive focusing window for seismic angle migration, Mathias Alerini, SINTEF.
16:35 Vp-Vs ratio estimation from 4D data, including anisotropy, Kenneth Duffaut, NTNU/Statoil.

19:00 Dinner, Kristiansten Festning

Tuesday 24th April

Session 2: Time lapse and reservoir characterization
Chair:

8:30 Anisotropic geometrical-spreading correction and its application in azimuthal AVO analysis, Ilya Tsvankin, Colorado School of Mines, USA
9:00 Induced microseismicity: from pore pressure diffusion to hydraulic fracturing, Serge Shapiro, Free University of Berlin, Germany
9:30 Estimation of saturation and pressure changes in compacting reservoirs, Thomas Røste, NTNU
9:45  Non-linear inversion for estimating reservoir parameters from time-lapse seismic data, Mohsen Dadashpour, NTNU.
10:00 Reflection coefficient estimation using Ensemble Kalman-filtering, Marco Haverl, NTNU/Hydro.

10:15  **Coffee break**

10:35  Seismic reservoir monitoring of in-situ combustion, Martin Landrø, NTNU
10:50  Attenuation of water-column noise using beamsteering, Hossein Mehdi Zadeh, NTNU
11:05  4D detection of gas coning, Alexey Stovas, NTNU
11:20  4D monitoring of CO2 sequestration, Amir Ghaderi, NTNU
11:35  Anisotropic limits, Mercia Silva, NTNU
11:50  Time-lapse gravimetric monitoring – a combined flow and gravity-modeling approach, Torkjell Stenvold, NTNU
12:05  4D tomography – initial results, Andreas Kjelsrud Evensen, NTNU

**12:15 LUNCH**

**Session 3: Rock physics related topics**

*Chair:*

13:00  Water-borne guided waves at Valhall with application to interpretation within the gas cloud, Peter Wills, Shell.
13:30  Stress and pore pressure dependent elastic anisotropy, Serge Shapiro, Free University, Berlin.
14:00  Stress sensitive wave velocities in weak rocks, Erling Fjær, SINTEF and NTNU
14:20  Reservoir geomechanical modeling using continuum and discrete element approaches. Application to fault reactivation. Haitham Al-Assi, NTNU

14:40  **Coffee break**

15:05  Compaction of sandstones, mudstones and carbonates – a comparison, Knut Bjørlykke, UIO
15:30  Injection induced 4-D time-lapse seismic effects, Rafig Manafov, UIS
15:50  Compaction behavior of unbonded granular media: Discrete particle vs. experimental vs. analytical modeling, Liming Li, SINTEF.
16:10  End of session

16:10  Discussion on future research directions.

17:00  Adjourn

**25th -26th April:** Course on seismic anisotropy, P13, 8:30  Ilya Tsvankin and Vladimir Grechka.