Seismic Characterization of Shales, Mudrocks & Tight Formations

EDGER FORUM Annual Meeting & Technical Symposium

4-6 March 2013 at The University of Texas at Austin

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Schedule of Events

3pm-6pm, Monday 4 March: Hotel Check-in: AT&T Executive Conference Center is the on-campus (Reservations: https://resweb.passkey.com/go/EDGERF0313)

7pm-9pm, Monday 4 March: KICK OFF DINNER in the North Ballroom of Student Activity Center

8am-5pm, Tuesday 5 March: Day 1 of Annual Meeting & Technical Symposium in the Auditorium of Thompson Conference Center

5pm-7pm Tuesday 5 March: Reception with Cocktails and Appetizers at the new Jackson School Holland Family Student Center

8am-9:30am, Wednesday 6 March: Members Business Meeting

9:30am-3pm, Wednesday 6 March: Day 2 of Annual Meeting & Technical Symposium

To register please contact the Forum Coordinator: Margo Grace by email: margo@jsg.utexas.edu or telephone: (512) 232-1920

Paper / Presentation Titles for 2013 EDGER Forum

Rock physics: modeling and applications
- Fluid-dependent velocity dispersion and attenuation in Berea sandstone: a comparison of squirt-flow models
- Error estimates of elastic tensor components in stress-dependent VTI media
- P-wave and S-wave angle dependent velocity prediction from anisotropic modeling
- Sensitivity of seismic reflections to variations in anisotropy in the Marcellus Shale, WV
- Characterization of saturated porous rocks with obliquely dipping fractures
- A workflow to estimate reservoir properties of unconventional gas shales: a case study on the Haynesville Shale

Reservoir characterization and seismic inversion
- Time-lapse pre-stack seismic data registration and inversion for CO_2 sequestration study at Cranfield
- Modeling fluid composition in CO_2 saturated sandstone using statistical rock physics, Cranfield Field, Cranfield, MS
- Estimation of fracture parameters after removing anisotropic overburden effect
- Modelling of 4D seismic at the Norne field
- Gas hydrates saturation estimation using geophysical methods - an application to Krishna-Godavari basin, India
- Application of principal component analysis to simultaneous seismic inversion

Wavefield modeling and migration
- Analysis of fracture-related seismic attenuation and scattering: insights gained through numerical modeling
- Scaling Fourier transform on GPU cluster and its application to reverse time migration
- Stress and strain analysis of pores in spherical grain packs
- Physical insight into the elastic Brewster's Angle for seismic shear waves
- Rotation of shear-wave components at non-normal angles of incidence Black-Bear data, Oklahoma
- Frequency-domain full waveform inversion with plane-wave data.
- Suppressing non-Gaussian noises with scaled receiver wavefield for reverse time migration.
- Double plane wave depth migration

Keynote Speaker
- Eric Von Lunen (Nexen) *"The Next Evolution, Where we are in Unconventional Geophysical Application"*