



The Jackson School of Geosciences
2011 Annual Meeting & Technical Symposium
Forum for Exploration and Development Geophysics Education & Research (EDGER)

Tentative Agenda
Monday, February 28, 2011

8:00-8:30 AM **Registration and Coffee**

8:30-8:35 Welcome!
Bob Tatham, Professor, Jackson School (DGS)

8:35-8:40 Introduction to Technical Program
Mrinal Sen, Professor, Jackson School (UTIG & DGS)

Session I:
Shales & Reservoirs: Rock Physics and Effective Media

8:40-9:00 Fracture Density Characterization in Tight Rocks
Kyle Spikes, Assistant Professor, Jackson School (DGS)

9:00-9:45 Accuracy Required in Seismic Modeling to detect Production-induced
Time-lapse Signatures
Alireza Shahin, Geophysicist, BP & Recent Jackson School Graduate

9:45-10:15 **Coffee Break**

10:15-10:40 Status of Student Research in Seismic Characterization of Resource Shale
Bob Tatham, Professor, Jackson School (DGS)

10:40-11:45 **Introduction to New Graduate Students at the Jackson School & their Projects:**

Sensitivity of the Seismic Response in the Productive Regions of the Marcellus Shale
Robert Brown, Graduate Student (MS)

Micro-structural Characteristics of the Haynesville Shale
Kwon Taek Oh, Graduate Student (MS)

The Quest of an Explorer for Challenges in Exploration Geophysics
Kumar Das, Graduate Student (PhD)

Velocity Modeling of CO₂-saturated Rocks from The Cranfield Site in Cranfield, MS
Russell Carter, Graduate Student (MS)

Anisotropy in the Woodford Shale: An Investigation Into Seismic Response Differences
Alexander Lamb, Graduate Student (MS)

Seismic Responses to Anisotropic Variations in Lower Marcellus Shale, NY and PA
Sharif Morshad, Graduate Student (PhD)

- 11:45-1:00 PM **Lunch**
- 1:00- 1:40 Overview and Status of the EDGER Forum
Robert Tatham, Professor, Jackson School (DGS)
- 1:40-2:05 Pore-stiffness, aspect ratio and composition effects on rock-physics modeling
in the Haynesville Shale
Meijuan Jiang, Graduate Student (PhD)
- 2:05-2:30 Effective-Medium Modeling of Fractured, Porous Medium
Ranjana Ghosh, Postdoctoral Fellow, UTIG
- 2:30-2:45 **Coffee Break**
- 2:45-3:10 Corrections for Distortion Polarization in Reflected Shear-wave for Isotropic and
Anisotropic
Terence Campbell, Graduate Student (PhD Candidate)
- 3:10-3:30 Modeling the Effects of Chemical Reactions on the Elastic Properties of Rock
Corey Joy, Graduate Student (MS)
- 3:30-3:40 **Coffee Break**
- Session II:
Computational Methods and EM**
- 3:40-4:00 Time Evolution of the Wave Equation using the Rapid Expansion Method for Highly
Accurate RTM
Paul Stoffa, Professor, Jackson School (UTIG & DGS)
& Reynam Pestana, Associate Professor (UFBA)
- 4:00-4:25 Petro-electric Modeling for CSEM Reservoir Characterization and Monitoring
Alireza Shahin, Geophysicist, BP & Recent Jackson School Graduate
- 4:25-4:45 Use of Seismic and EM Data for Exploration, Appraisal and Reservoir Characterization
Anton Ziolkowski, Professor, University of Edinburgh
- Open Discussion
- 6:30-9:00 PM **The Annual EDGER Forum Dinner will take place in the Santa Rita Suite,
3rd Floor of the Texas Union Building on the west side of UT Campus**



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Tentative Agenda
Tuesday, March 1st, 2011

- 8:00-8:30 AM **Morning Coffee**
- 8:30-9:45 **Business Meeting / EDGER Forum Steering Committee Meeting**
(For members and Potential Members only)
- 9:45-10:00 **Coffee Break**
- Session III:**
Reservoir Characterization and Inversion of Seismic Data
- 10:00-10:30 Reflections from a Fractured Porous Medium
Mrinal Sen, Professor, Jackson School (UTIG & DGS)
- 10:30-10:50 Comparison of Fluid Prediction Success between AVO and Bright Spot Techniques
in the Marco Polo Field, Gulf of Mexico
Krongrath Suwannasri, Undergraduate Student (BS Geophysics)
- 10:50-11:05 **Coffee Break**
- 11:05-11:30 Sensitivity Study of Fracture Parameters in a Carbonate Oil Reservoir in Saudi Arabia
Mohammed Alhussain., Graduate Student (PhD)
- 11:30-11:55 Seismic Monitoring of CO₂ Sequestration at Dickman Field, Kansas
Son Phan, Graduate Student (MS)
- 12:00-1:15 PM **Lunch**
- 1:15-1:40 Inversion for Splay Fault Interpretation in the Nankai Trough, Japan
Yi Tao, Graduate Student (PhD Candidate)
- 1:40-2:10 PP & PS Wave Image and Joint Stochastic Prestack Inversion in the Same PP
Timescale Domain
Zhiwen Deng, Visiting Scholar (UTIG)
- 2:10-2:25 **Coffee Break**
- 2:25-2:55 Seismic Reflection Inversion with Basis Pursuit
Rui Zhang, Post-doctoral Fellow (UTIG)
- 2:55-3:15 Greedy Annealed Importance Sampling for Geophysical Inversion
Yang Xue, Graduate Student (PhD)
- Open Discussion
- 4:00 **Adjourn**