

# AGENDA

## UT-Dallas Geophysical Consortium

### 2009 Annual Sponsor's Meeting

### March 5 & 6, 2009

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THE GALAXY CONFERENCE ROOMS  
UTD STUDENT UNION BUILDING  
The University of Texas at Dallas

#### THURSDAY MAR 5: MORNING SCHEDULE

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9:15 - 9:45 REGISTRATION, COFFEE AND LATE BREAKFAST (GALAXY ROOM)

9:45 - 10:00 SUMMARY OF 2008 PROJECTS AND CONSORTIUM HIGHLIGHTS

George McMechan

10:00 - 12:00 SEISMIC MIGRATION AND VELOCITY ANALYSIS

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Bao Nguyen            Source wavefield reconstruction techniques for  
prestack reverse-time migration: A comparative  
study

Ernesto Oropeza    Parsimonious anisotropic prestack migration

Ting Gong            Velocity analysis for wave equation based processing  
with application to land field data with strong  
topography and near-surface velocity variations

Kun Xu                Implementation of prestack reverse-time migration  
in the frequency domain

Ernesto Oropeza    Migration velocity analysis for anisotropic media

12:00 - 1:00 BUFFET LUNCH & INFORMAL DISCUSSION (GALAXY ROOM)

THURSDAY MAR 5: AFTERNOON SCHEDULE

1:00 - 2:40 ALGORITHMS AND APPLICATIONS

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- Juanjuan Cao Velocity-independent prediction of multiples  
from slowness relations in 2-D
- Ashwani Dev Anti-alias spatial filtering: A slowness-frequency  
approach
- Juanjuan Cao Velocity-independent prediction of multiples  
from slowness relations in 3-D
- Gordon Davison Detecting structures and stratigraphy in 3-D seismic  
volumes

2:40 - 2:50 COFFEE BREAK

2:50 - 4:20 ALGORITHMS AND HARDWARE

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- Yanrong Hu Elastic stiffness vs compliance: Theoretical issues
- Heru Rusmanugroho 3-D anisotropic elastic wavefield separation
- Qunshan Zhang 3-D anisotropic elastic wavefield decomposition  
in the wavenumber domain
- Xiaoxian Zeng Cluster hardware update and the Texas  
Advanced Computing Center (TACC)

4:20 - 5:15 POSTERS AND INFORMAL DISCUSSION (POSTERS WILL BE UP BOTH DAYS)

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- Ashwani Dev Wavenumber domain correction to elastic seismic data  
for recording groups
- Cambrey Salazar 3-D, 3-C Full-wavefield finite-difference  
anisotropic modeling of the fractured Barnett Shale
- Heru Rusmanugroho Sensitivity of 3-D 9-C wide azimuth data to changes  
in fracture density and fluid content, in fractured  
reservoirs
- Lee et al. A 3-D GPR and wavelet transform analysis of the  
morphology of shoreface deposits in the Upper  
Cretaceous Ferron Sandstone Formation, Utah

Feng Deng            3-D true amplitude prestack migration  
Yanrong Hu           3-D, 3-C full-wavefield modeling of strong  
                         anisotropy  
Juanjuan Cao        Multiple prediction and subtraction, from slowness  
                         relations

Geosciences Department    Overview of Activities in Geosciences at UTD

Authors                Reprints of 2008 papers

5:30 BANQUET IN THE MCDERMOTT SUITE (4TH FLOOR OF THE MCDERMOTT  
LIBRARY)

FRIDAY MARCH 6: MORNING SCHEDULE  
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8:30 - 9:00 BREAKFAST (GALAXY ROOM)

9:00 - 10:15 FIELD DATA ANALYSIS  
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Jack Deans            Inversion of data from a carbonate reservoir in  
                         the Permian Basin

Martin Nyamapfumba    Seismic attributes and interpretation of gas  
                         hydrate data from Block 31, offshore Angola

Ashwani Dev            Interpreting the Effects of Structural Control on  
                         Gas Hydrates in the Gulf of Mexico

10:15 - 10:30        COFFEE BREAK

10:30 - 11:50 3-D SEISMIC MODELING AND INVERSION  
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Yanrong Hu            3-C, 3-D seismic modeling for HTI media with  
                         high crack density

Heru Rusmanugroho    AVO characterization from wide azimuth 9-C  
                         seismic data

Hui Chang             3-D full-wavefield elastic inversion for anisotropic  
                         parameters

11:50 - 12:50 LUNCH & INFORMAL DISCUSSION (GALAXY ROOM)

FRIDAY MARCH 6: AFTERNOON SCHEDULE  
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12:50 - 2:05 RESERVOIR ANALOGS

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Hussein Harbi Tomography and 3D migration of an Ellenberger  
reservoir analog, Burnet County, central Texas

Xiaoxian Zeng Imaging and analysis of Texas Gulf Coast barrier  
bars as reservoir analogs

Hussein Harbi Porosity and permeability analysis using GPR  
scattering and EM property inversions

2:05 - 2:20 COFFEE BREAK

2:20 - 2:40 SUMMARY OF OTHER 2008 PROJECTS

George McMechan

2:40 - 3:05 DISCUSSION / QUESTIONS

3:05 ADJOURN TO SNACKS & COFFEE