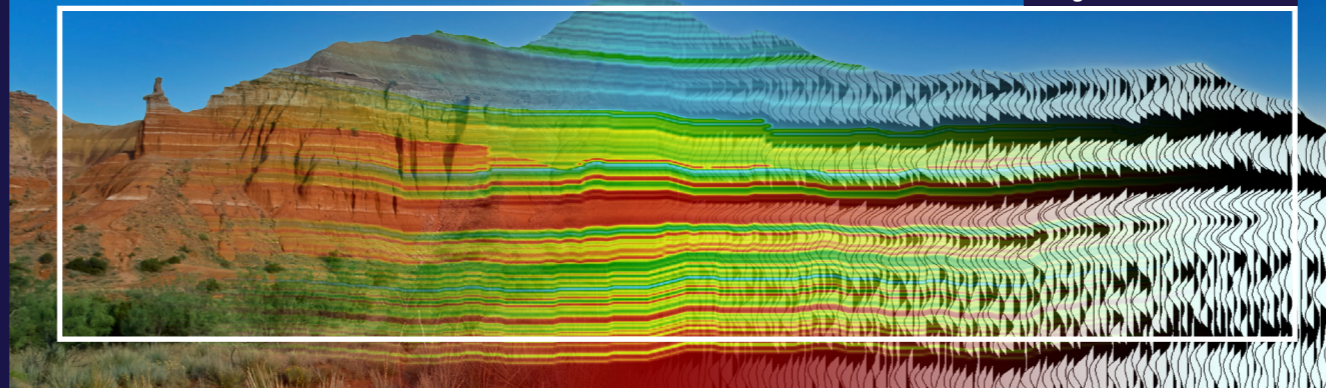


Quantitative Interpretation - Towards Integrated Predictive Sub-Surface Models

24-26 August 2021 | Virtual Workshop

Image Credit : Ikon Science



PROGRAMME

GULF STANDARD TIME

Schedule

- 01:00 - 06:00 HOURS : US (CST)
07:00 - 12:00 HOURS : LONDON
08:00 - 13:00 HOURS : AMSTERDAM/BERLIN/
PARIS/OSLO
09:00 - 14:00 HOURS : RIYADH/DOHA/
KUWAIT CITY/MOSCOW
10:00 - 15:00 HOURS : UAE
11:30 - 16:30 HOURS : NEW DEHLI
13:00 - 18:00 HOURS : BANGKOK/JAKARTA
14:00 - 19:00 HOURS : KUALA LUMPUR/
BEIJING/PERTH/SINGAPORE
15:00 - 20:00 HOURS : TOKYO/SEOUL
16:00 - 21:00 HOURS : BRISBANE

Commitee

- MARK SAMS, PETRONAS - CO-CHAIR
ROSEMARY QUINN, HESS - CO-CHAIR
ALESSANDRO MANNINI, BEACH ENERGY
CYRILLE REISER, PGS
HILFAN KHAIRY, PERTAMINA
JIMMY TING, CGG
JONATHAN SCORER, CONOCOPHILLIPS
KESTER WATERS, IKON SCIENCE LTD
LAURENT BOURDON, PETRONAS
MAMAN HERMANA, UNIVERSITI TEKNOLOGI
PETRONAS
PETER MCGILLIVRAY, MUBADALA PETROLEUM
ROB ROSS, GEYE
SAGAR RONGHE, DUG

Tuesday, 24 August 2021

All sessions are in Gulf Standard Time

- 10:00 - 10:10 **Welcome Message by Technical Committee Co-Chairs**
10:10 - 10:20 **SEG Leadership Keynote Speaker - Anna Shaughnessy, SEG President Elect**
10:20 - 10:50 **Opening Address by Padsakorn Suwanruji, PTTEP**
- SESSION 1 DATA AND DATA CONDITIONING (I)**
Session Chair: Rob Ross (Geye) and Peter McGillivray (Mubadala Petroleum)
- 10:50 - 11:10 **The Signal and the Noise**
Pat Connolly, PCA
- Scale Considerations in Seismic Quantitative Interpretation**
Dries Gislaf, Delft-Inversion
- 11:10 - 11:30 **Estimating the Full-Bandwidth Earth Model with Simultaneous Inversion of Velocity and Reflectivity.**
Nizar Chemingui, PGS
- 11:50 - 12:20 Moderated Discussion - 30mins
- 12:20 - 12:35 Networking Break - 15mins
- SESSION 2 2 DATA AND DATA CONDITIONING (II)**
- 12:35 - 12:55 **Wide -angle AVO inversion of common p-traces:AVP**
Dennis Cooke, ZDAC Geophysical Technologies Pty. Ltd
- 12:55 - 13:15 **Utilising Facies-Based Inversion as a QC Tool for Post-Migration Gather Conditioning**
David Goudling, Sharp Reflections Ltd
- 13:15 - 13:35 **Monitoring Changes of Subsurface Properties using Direct-Wave Amplitudes Measured by Downhole Distributed Acoustic Sensors**
Boris Gurevich, Curtin University
- 13:35 - 13:55 **Examples of Seismic Technology Integration into Subsurface Models to reduce risk**
Norbert vd Coevering, Oxy Oman
- 13:55 - 14:25 Moderated Discussion - 30mins
- 14:25 - 15:25 Post event non-moderated forum

Wednesday, 25 August 2021

All sessions are in Gulf Standard Time

- SESSION 3 INVERSION**
Session Chair: Kester Waters (Ikon Science Ltd) and Maman Hermana (Universiti Teknologi PETRONAS)
- 10:00 - 10:20 **Joint Facies/Elastic Inversion: optimisation as a key tool for inference and uncertainty**
James Gunning, CSIRO
- 10:20 - 10:40 **Depth Trends in Facies Classification using Direct Probabilistic Inversion**
Ask Frode Jakobsen, Geye
- 10:40 - 11:00 **Automated facies classification for seismic**
Roman Beloborodov, CSIRO
- 11:00 - 11:20 **Spatial Bayesian lithology/fluid class inversion**
Torstein Fjeldstad, Norwegian University of Science and Technology
- 11:20 - 11:50 Moderated Discussion - 30mins
- 11:50 - 12:05 Networking Break - 15mins
- SESSION 4 ANISOTROPY AND AVO**
Session Chair: Johnathan Scorer (ConocoPhillips) and Mark Sams (PETRONAS)
- 12:05 - 12:25 **A multi-objective approach for quantitative interpretation for anisotropic shale models**
Arthur Cheng, National University of Singapore
- 12:25 - 12:45 **Anisotropic Amplitude versus-Offset Inversion via Variational Inference**
Ahmed Shafik, National University of Singapore
- 12:45 - 13:05 **Quantitative seismic interpretation guided by multi-scenario rock physics and AVO feasibility modeling**
Per Avseth, DIG Geoscience
- 13:05 - 13:35 Moderated Discussion - 30mins
- 13:35 - 14:35 Post event non-moderated forum

Thursday, 26 August 2021

All sessions are in Gulf Standard Time

- SESSION 5 INTERPRETATION**
Session Chair: Alessandro Mannini (Beach Energy) and Jimmy Ting (CGG)
- 10:00 - 10:20 **Model versus Facies based inversion approach in a carbonate pinnacle**
Pauline Wong, Mubadala Petroleum
- 10:20 - 10:40 **Iterative update of absolute simultaneous inversion for optimal lithology prediction**
Sagar, Downunder Geosolutions
- 10:40 - 11:00 **Secrets of Facies- Inversion Workflows**
John Pendrel, CGG
- 11:00 - 11:30 Moderated Discussion - 30mins
- 11:30 - 11:45 Networking Break - 15mins
- ARTIFICIAL INTELLIGENCE**
Session Chair: Laurent Bourdon (PETRONAS) and Sagar Ronghe (DUG)
- SESSION 6**
- 11:45 - 12:05 **Quantifying Uncertainty in Machine Learning for Geophysical Applications**
Ehsan Naeini, Earth Science Analytics AS
- 12:05 - 12:25 **Integrated Seismic Based Reservoir Porosity Prediction using Deep Learning Method**
Raghu Chunduru, Shell
- 12:25 - 12:45 **Seismic Inversion Method using Convolutional Neural Network: A Case Study from the Abadi Field**
Shuichi Desaki, INPEX Corporation
- 12:45 - 13:15 Moderated Discussion - 30mins
- 13:15 - 13:35 **Quantitative Interpretation in Support of the Energy Transition**
Stephan Gelinsky, Shell International E & P
- 13:35 - 13:40 Wrap-up by Workshop Technical Co-Chairs
- 13:40 - 14:40 Post-Event Non-Moderated Forum