

Frederik PIVOT, Mehdi BOUAYAD - *Machine Learning & AI for Seismic Reservoir Characterization session* — Tu, June 7, 9:30 AM - 12:30 PM

9:50AM An Elegant Lithoseismic Method Using Deep Learning Applied to 3D Mapping of Turbiditic Systems
L. Boillot, **F. Pivot (TotalEnergies)** and **M. Bouayad (TotalEnergies/Geosciences Montpellier)**

Hervé PRIGENT - *FWI and Velocity Model Case Studies 1 session* — Tu, June 7, 9:30 AM - 12:30 PM

09:50AM Ps Imaging on the Edvard Grieg Field: Application of Ps Reflection Fwi and Fwi Imaging
M. Peiro, W. Gao, A. Fotsoh, N. Masmoudi, A. Roodaki, A. Ratcliffe, **H. Prigent (CGG)**, O. Leblanc, P.E. Dhelie, V. Danielsen, J.A. Haugen and K.R. Straith

Jean-Rémi DUJARDIN - *Geological Storage of Hydrogen or CO₂ - 1 (Joint EAGE/SPE) session* — Tu, June 7, 9:30 AM - 12:30 PM

10:10AM From surface deformation to pressure fields: contribution of machine learning to cost-effective CO₂ injection monitoring
J. Dujardin* (NGI), J. Park and T. Bjørnarå

Hugues BAUDON, Laurent SIRGUE - *FWI and Velocity Model Case Studies 1 session* — Tu, June 7, 9:30 AM - 12:30 PM

11:10AM Trade-Off Between Cost and Quality for Operational Fwis
P. Trinh, C. Rivera, S. Whitehead, **H. Baudon (TotalEnergies)**, G. Maman-Koumba, E. Bergounioux, A. M-Riou and **L. Sirgue (TotalEnergies)**

Marc BELLER - *FWI and Velocity Model Case Studies 1 session* — Tu, June 7, 9:30 AM - 12:30 PM

11:10AM Improved Imaging Through FWI and Least Squares Kirchhoff Migration: A Dutch North Sea Example
C. Purcell, L. Casasanta, H. Lund, R. Bartlett and **M. Beller (Wintershall Noordzee BV)**

Florine MASCLET - *Clastic Sedimentary Systems session* — Tu, June 7, 9:30 AM - 12:30 PM

11:30AM 3D Seismic Analysis of the Cenozoic Lower Congo Sedimentary System in the Shelf-Slope Domain
P. Jermannaud, S. Arsenikos, E. Leguerroué, **F. Masclet (Beicip-Franlab)**, I. Rocha and A. Ribeiro

Carine ROALKVAM - *Marine Seismic Acquisition session* — Tu, June 7, 9:30 AM - 12:30 PM

11:30AM Combining Wide-Tow Multi-Sources with a Non-Uniform Streamer Configuration: a Case Study from the Sarawak Basin
M. Widmaier, **C. Roalkvam (PGS)**, O. Orji and A. Misra

François RENARD - *Exploration Case Histories Poster session* — Tu, June 7, 9:30 AM - 12:30 PM

11:50AM Quantifying Depth Uncertainty: a Geostatistical Velocity and Anisotropy Analysis over the Petrel Field, Australia
K. Dancer, G. Byerley, **F. Renard (Neptune Energy)**, P. Woods and T. Rayment

Patrick BAUD - *Rock-Physics and Quantitative Interpretation in Fractured Media poster session* — Tu, June 7, 11:10 AM - 12:30 PM

12:10PM Effective pressure laws for dual porosity limestone
P. Baud* (EOST-ITES), F. Meng and T. Wong

Amine OURABAH - *Seismic Acquisition session* — Tu, June 7, 3:15 PM - 6:15 PM

Chairperson: Massimo Di Giulio & **Amine Ourabah (Stryde)**

Joffrey BRUNELLIÈRE - *Multicomponent Seismic Acquisition and Reservoir Monitoring session* — Tu, June 7, 3:15 PM - 6:15 PM

3:15PM Processing and Imaging of Four-Component Ocean-Bottom Node Data over a Giant Middle Eastern Field
E. Saragoussi, A. Alemam, S. Hepting, Y. Bekhtin, L. Bovet, **J. Brunellière (TotalEnergies)** and S. Sioni

- Coline EURIAT - *Geostatistical Methods session* — Tu, June 7, 3:15 PM - 4:35 PM
 3:35PM A Comprehensive Workflow for Managing Uncertainties on Unstructured Grids, Including Filling and Structural Uncertainties
 P. Biver, **C. Euriat (TotalEnergies)**, D. Allard, D. D'Or, S. Berthelin and A. Walgenwitz
- Philippe CAPRIOLI - *Multicomponent Seismic Acquisition and Reservoir Monitoring session* — Tu, June 7, 2022
 3:15 PM - 6:15 PM
 4:55PM Robust prediction of upgoing multiples using the direct arrival wavefield on OBS data
P. Caprioli* (Schlumberger) and P. Kristiansen
- Estelle REBEL, Vincent BREMAUD, Corinne SAGARY - *Multicomponent Seismic Acquisition and Reservoir Monitoring session* — Tu, June 7, 3:15 PM - 6:15 PM
 5:15PM Are fiber optic cables part of the next generation toolbox for CO2 storage monitoring?
E. Rebel* (TotalEnergies), **V. Bremaud (TotalEnergies)**, E. Zamboni and **C. Sagary (Alcatel Submarine Network)**
- Jérémie GIRAUD, Paul CUPILLARD - *Potential Field Methods session* — Tu, June 7, 3:15 PM - 6:15 PM
 5:15PM Geometrical inversion coupled with automated geological modelling
J. Giraud* (Université de Lorraine, University of Western Australia), G. Caumon, L. Grose and **P. Cupillard (Université de Lorraine)**
- Stéphane ROUSSE - *Sedimentary Systems & Tectonics & Reservoir Quality Poster session* — Tu, June 7, 3:15 PM - 6:15 PM
 5:35PM Integrated Petrophysical and Sedimentological Characterization of Chlorite-Bearing Late Devonian Reservoir Sandstones, Chaco Basin, Bolivia
 B. Valsardieu, **S. Rouse (Beicip Franlab)**, M. Blanco, J. Cordova, C. Calle and F. Schneider
- Corinne SAGARY - *Multicomponent Seismic Acquisition and Reservoir Monitoring session* — Tu, June 7, 3:15 PM - 6:15 PM
 5:35PM A North Sea Case Study: Does Das Have Potential for Permanent Reservoir Monitoring?
 Å.S. Pedersen, H. Westerdahl, M. Thompson, **C. Sagary (Alcatel Submarine Networks)** and J.K. Brenne
- Gwenola MICHAUD - *Seismic Reservoir Characterization Integrated Subsurface session* — Wednesday, June 8, 2022 9:30 AM - 12:30 PM
 Chairperson: Sonja Maultzsch & **Gwenola Michaud (Cognite)**
- Guillaume HENIN, Sylvain MASCLET - *High Resolution, Shallow Marine Seismic session* — We, June 8, 9:30 AM - 12:30 PM
 09:30AM Large-Scale 3D High-Resolution Near-Surface Imaging over Nordkapp
G. Henin (CGG), I. Espin, N. Salaun, **S. Mascret (CGG)**, P.E. Dhelie, V. Danielsen and J.E. Lie
- Joffrey BRUNELLIÈRE - *High Resolution, Shallow Marine Seismic session* — We, June 8, 9:30 AM - 12:30 PM
 9:50AM Regional 3D Near-Field Hydrophone Imaging: Adding Value to Dense Obn Acquisition from Offshore Arabian Gulf
 C. Tyagi, H. Xu, M. Ferriday, G. Riley, J. Gomes, L. Bovet, **J. Brunelliere (TotalEnergies)** and S. Sioni
- Pascal EDME - *Signal, Noise and Separating Wavefields session* — We, June 8, 9:30 AM - 12:30 PM
 9:50AM Distributed fiber-optic sensing for local ground-roll estimation and attenuation
P. Edme* (ETH Zurich), T. Kiers, P. Paitz and J.O.A. Robertsson
- Didier RAPPIN - *Time-Lapse Interpretation and Value session* — We, June 8, 9:30 AM - 12:30 PM
 09:50AM 4D Broadband: Added Values and Lessons Learnt — Integrated Study in a Depleted Field in Angola
 P. Trinh, N. Nangiata, E. Makiona, T. Blanchard, **D. Rappin (TotalEnergies)**, M. Baturin, M. Amri, A. Lafram, A. Grandi and A. Adeyemi
- Anne-Sophie BARNOLA - *Seismic Reservoir Characterization session* — We, June 8, 9:30 AM - 12:30 PM
 10:30AM Deep-Learning Solutions for Seismic Reservoir Characterization: Where Do We Stand?
 M. Diaby, **A. Barnola (TotalEnergies)**, C. Agut, E. Sadeghi and A. Adeyemi

- Didier RAPPIN - *Time-Lapse Interpretation and Value session* — We, June 8, 9:30 AM - 12:30 PM
 11:10AM 4D signal modeling in carbonates for time-lapse potential evaluation. Middle East Case history
D. Rappin* (TotalEnergies), N. Singh, S.A. Khoori, K. Ouldamer and P. Debec
- Amine OURABAH - *Natural Gas Storage & CO2 and Waste Storage session* — We, June 8, 9:30 AM - 12:30 PM
 11:30AM Affordable ultra-high-density seismic surveys for CCUS
A. Ourabah* (Stryde), D. Lawton and A. Chatenay
- Mohammed Ouhmane FAOUZI ZIZI, Pierre TURQUAIS - *Signal, Noise and Separating Wavefields session* —
 We, June 8, 9:30 AM - 12:30 PM
 11:50AM Simultaneous dual sensor wavefield separation and seismic data compression using parabolic
 dictionary learning
M.O. Faouzi Zizi* (PGS / University of Oslo), **P. Turquais (PGS)**, A. Day and M.W. Pedersen
- Amine OURABAH - *High Resolution, Shallow Marine Seismic session* — We, June 8, 9:30 AM - 12:30 PM
 11:50AM Comparison and Integration of Active and Passive 3D Surface Wave Measures Around the Scrovegni
 Chapel
 I. Barone, G. Cassiani, **A. Ourabah (Stryde)**, J. Boaga, M. Pavoni and R. Deiana
- Philippe HERRMANN - *Signal, Noise and Separating Wavefields session* — We, June 8, 9:30 AM - 12:30 PM
 12:10PM Joint Designature of Tuned Pulse Source Data with Pressure Diversity
 S. Ronen, **P. Herrmann (Sercel)**, S. Laroche, M. Kryvohuz, G. Baeten and H. Macintyre
- Guillaume GIGOU, Sylvain MASCLET - *Imaging Case Studies session* — We, June 8, 3:15 PM - 6:15 PM
 3:55PM Introducing Deep Neural Networks for Ultra-Fast Track Processing: A new early-out product for QC
 and interpretation
G. Gigou* (CGG), L. Janot, N. Salaun, **S. Masclet (CGG)**, I. Espin, P.E. Dhelie, V. Danielsen and J.E. Lie
- Camille JESTIN, Jean-Claude PUECH, Christophe MAISONS, Laure DUBOEUF - *Borehole Seismic with
 Wireline and DAS session* — We, June 8, 3:15 PM - 6:15 PM
 4:55PM On the choice of deployment and processing parameters for Distributed Acoustic Sensing seismic
 survey results optimization
C. Jestin* (Febus Optics), **J.C. Puech (Realtimeseismic)**, **C. Maisons (Febus Optics)**, **L. Duboeuf
 (Realtimeseismic)** and A. Chérubini
- Thomas REBERT, Lilas VIVIN - *Imaging Case Studies session* — We, June 8, 3:15 PM - 6:15 PM
 4:55PM Depth imaging in North Kuwait: Challenges and solutions
T. Rebert* (CGG), **L. Vivin (CGG)**, O. Bouhdiche, C. Bossy, F. Haouam, N. Rordjaroenpan, M. Retailleau,
 D. Le Meur, A. El-Emam, M. Ali and H. Bayri
- Michel VERLIAC - *Borehole Seismic with Wireline and DAS session* — We, June 8, 3:15 PM - 6:15 PM
 5:35PM Optimizing of a Das VSP Image for 4D Assessment at the Culzean Field
 H. Moore, M. Galyga, B. Lowney, E. Kaszycka, V. Lesnikov, A. Merry, A. Mitra, D. Taylor, R. Bellahsene and
M. Verliac (TotalEnergies)
- Michel VERLIAC - *Borehole Seismic with Wireline and DAS session* — We, June 8, 3:15 PM - 6:15 PM
 5:55PM De-Risking 4D Seismic in an HphT Field Via 4D Das Vsp Monitoring at Culzean
 A. Merry, V. Lesnikov, A. Mitra, D. Taylor, R. Bellahsene, **M. Verliac (TotalEnergies)** and C. Le Magoarou
- Antoine GUITTON - *Signal Processing session* — Th, June 9, 9:30 AM - 12:30 PM
 Chairperson: Gabriele Busanello & **Antoine Guitton* (TotalEnergies)**
- Thomas SCHAAF - *Machine Learning, AI, and Digitisation for More Efficient Operations 1 session (SPE)* — Thursday,
 June 9, 2022 9:30 AM - 12:30 PM
 Chairperson: Carolina Coll (IFC) & **Thomas Schaaf (Storengy/Engie)**

Coralie MATHIEU - *Azimuth-Rich Data γ V Processing and Imaging session* — Th, June 9, 9:30 AM - 12:30 PM
9:50AM The Value of Dual-Azimuth Acquisition: Imaging, Inversion and Development over the Dugong Area
T. Latter, M. Gram-Jensen, F. Buriola, H. Dinh, M. Faggetter, R. Jupp, M. Townsend, N. Grinde, **C. Mathieu (Neptune Energy)** and G. Byerley

Julien RAZZA, Fabien CUBIZOLLE - *Seismic Attributes for Lithology session* — Th, June 9, 9:30 AM - 12:30 PM
9:50AM Methods for Multi-Horizon Driven Waveform Classification
J. Razza* (Eliis), **F. Cubizolle (Eliis)** and L. Evano

Guillaume SAUVIN - *CO2 and Waste Storage Subsurface Characterization session* — Th, June 9, 9:30 AM - 12:30 PM
9:50AM Integrated Characterization of the Faulted Caprock Shales of the Longyearbyen CO2 Lab
P. Betlem, T. Birchall, G. Lord, K. Løvlie, L. Nakken, S. Oldfield, K. Ogata, **G. Sauvin (NGI)**, K. Senger, E. Skurtveit, J. Park and A. Smyrak-Sikora

Noémie PERNIN - *CO2 and Waste Storage Subsurface Characterization session* — Th, June 9, 9:30 AM - 12:30 PM
10:30AM Integrated Workflow for Characterization of CO2 Subsurface Storage Sites
N. Pernin (PGS), C. Reiser and E. Mueller

Thomas SCHAAF - *Dynamic Simulation: From Core to Reservoir session* — Th, June 9, 3:15 PM - 6:15 PM
Chairperson: Hamidreza Salimi & **Thomas Schaaf (Storengy/Engie)**

Philippe BERTHET - *Dynamic Simulation: From Core to Reservoir session* — Th, June 9, 3:15 PM - 6:15 PM
3:15PM Closing the calibration loop for multi scenario of fault throw on a condensate gas field
P. Berthet* (TotalEnergies), A. Irving, M. Lapassade, D. Busby, D. Ledez, H. Berthet and R. Bursaux

Fabien CUBIZOLLE, Julien RAZZA - *Seismic Attributes for Structure session* — Th, June 9, 3:15 PM - 6:15 PM
3:15PM Multichannel Spectral Decomposition Using Matching Pursuit Steered by a Relative Geological Time Model
L. Evano, **F. Cubizolle (Eliis)** and **J. Razza (Eliis)**

Antoine GUITTON - *Advances in Interpolation and Regularisation session* — Th, June 9, 3:15 PM - 6:15 PM
3:15PM An approximation of the mutual coherence for compressive sensing problems
A. Guittton* (TotalEnergies) and J. Loubani

Marc BELLER - *Geomodelling - Static Modelling 2 session* — Th, June 9, 3:15 PM - 6:15 PM
3:55PM Identifying Upside Potential Using Static Models And Seismic Forward Modelling
R. Bachmann and **M. Beller* (Wintershall Noordzee BV)**

Didier LECERF, Mathieu LANGE - *Time-Lapse Seismic session* — Th, June 9, 3:15 PM - 6:15 PM
4:15PM Water Column Corrections, Joint Water Velocity Inversion for 4D Marine Surveys
D. Lecerf* (PGS), **M. Lange (PGS)**, A. Oates and J. Kumar

Alexandre BERTRAND - *Time-Lapse Seismic session* — Th, June 9, 3:15 PM - 6:15 PM
4:55PM Optimised Frequency-Weighted Deghosting of Time-Lapse (4D) Surveys to Improve Low-Frequency Match
G. Apeland, J. Yuan, O. Thompson, R. Whitebread, S. Høgden, M. Bertarini and **A. Bertrand (Vår Energi)**

2022-05-26, MS

