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20-22 MARCH 2023 | LONDON | UNITED KINGDOM

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MONDAY 20 MARCH 2023

Last updated 17 March 2023.

INNOVATION HUB		MAIN STAGE	
08:30		Welcome Coffee	
Opening Ceremony & Plenary Day 1			
09:00	Welcome - G. Guerra ^{1*} ¹ Shell		
09:05	Keynote Presentation - Role of leadership and key learnings from Shell's digital journey - M. Gerrits ^{1*} ¹ Shell		
09:25	Keynote Presentation - Business model innovation story from outside O&G industry - A. Rai ^{1*} ¹ X Ventures		
09:45	Panel Discussion - Redefining competition: Business models of the future - M. Wynne (moderator) ¹ , M. Bashforth ² , G. Guerra ³ , M. Virgilio ⁴ , C. Yeleshwarapu ⁵ , R. Hasaneen ⁶ ¹ S&P Global Commodity Insights; ² OvationData; ³ Shell; ⁴ Shearwater; ⁵ Halliburton; ⁶ AspenTech		
10:45		Coffee Break	
Strategic Session 1		ML for Seismic Domain I Session Chair: A. Karagul (TotalEnergies)	
11:10	Roundtable Discussion - Overcoming cultural and organisational barriers - T. Randen ¹ , S. Chaleunxay ² , F. Menapace ³ , S. Sobodka ⁴ , P. Sabharwal ⁵ ¹ SLB; ² AWS; ³ Shell; ⁴ Wintershall Dea; ⁵ Halliburton	11:10	Deep learning strategies for seismic demultiple - M. Fernandez ^{1,2*} , N. Ettrich ¹ , M. Delescluse ² , A. Rabaut ³ , J. Keuper ^{1,4} ¹ Fraunhofer ITWM; ² Ecole Normale Supérieure de Paris; ³ Sorbonne Université; ⁴ Offenburg University
		11:30	MPI-free FWI for Cloud Spot Markets: Faster and Cheaper Results - C. Mavropoulos ^{1*} , A. Umpleby ¹ ¹ S-cube
11:50	Roundtable Discussion - Transforming talent approaches for a new energy era - S. Santamarta ¹ , Q. Tran ² , P-Y Raya ³ , M. Davies ⁴ , N. Choudhary ⁵ ¹ BCG; ² Shell; ³ Wintershall Dea; ⁴ CGG; ⁵ SLB	11:50	Improving Reservoir Property Prediction Using Synthetic Data Catalog and Deep Neural Network in Poseidon field, Australia - P. Didenko ^{1*} ¹ Geosoftware
		12:10	Exploring Convolutional Neural Networks and Machine Learning for Oil Sands Drill Core Image Analysis - F. Anzum ¹ , H. Hamdi ^{1*} , U. Alim ¹ , M. Costa Sousa ¹ ¹ University Of Calgary
12:30		Networking Lunch	
EXHIBITION FLOOR			
Poster Session			
13:10	Digital levers to cut cost and risk of gas supply and carbon capture storage in transition - K. Armitage ^{1*} , A. Hardwick ² , T. Brierley ³ , P. Mewett ¹ , G. Roberts ⁴ ¹ Rejuvenate Energy Ltd; ² Hardwick Geophysical; ³ Consultant; ⁴ Spec Partners Ltd		
	The Required Value of open digital platforms: An example of connection to third party applications - D. Gese Jarque ^{1*} ¹ Resoptima		
	Benefits of Earth Intelligence® when modeling O&G reservoirs: an exploration case study - L. Sandjiv ^{1*} , M. Collet ² ¹ Earth Resource Management Services; ² SEISQUARE		
	Reuse and recycle knowledge, not only data - C. Warren ¹ , N. Masurek ^{1*} , A. Laake ¹ , C. Wray ¹ ¹ SLB		
	A citation network analysis on diffusion of technologies to other fields: A case study about FWI - S. Masaya ^{1*} , Y. Nishitsuji ² ¹ INPEX; ² Delft University of Technology		
	Exploring Volume Data Store format to speedup seismic image segmentation in the Cloud - L. Boillot ¹ , G. Fuss ^{1*} ¹ TotalEnergies		
	Indonesian Oil and Gas Showroom for Increasing the Oil and Gas Exploration and Production - S.E. Saputra ¹ , A.D. Wibisono ¹ , R.N.A.C.P. Pratama ¹ , F.T. Amir ^{1*} ¹ SKK Migas		
	Missing Seismic Trace Estimation using Generative Adversarial Network: Image-to-Image Translation Method - S.K. Sandasegaran ^{1*} , H. Pratama ³ , L. Syahputra ² , S. Teng ¹ , M. Putra ² ¹ PETRONAS; ² Universiti Teknologi PETRONAS; ³ dGB Earth Sciences		
	A Case Study of Onshore Oil Reservoir Mapping for De-risking Exploration and Exploitation in Indonesia - A. Abdul Azizurrofi ^{1*} , A. Asnidar ¹ , A. Septania Wisudawati ¹ , I. Taufik Sutanto ¹ ¹ SKK Migas		
	Citizen Data Scientist Toolbox for petrophysicist domain experts: case study Petroleum Industry of Serbia - T. Micić Ponjiger ^{1*} , S. Šešum ¹ , M. Naugolnov ¹ , S. Peruničić ¹ , V. Mihajlović ¹ ¹ STC of Petroleum Industry of Serbia		
	Well data quality assurance: How to ingest, validate, publish, and manage data for Real Time applications - P. Tempone ^{1*} , C. Piras ¹ , N. Lamonaca ¹ , M. Biagi, L. Biagiola ¹ , C. Occhiena ² , A. Crottini ¹ , C. Sanasi ¹ ¹ ENI E&P; ² Kwantis		
	Modeling and Predicting the Operating Costs of Oil field Projects against Fluctuations in Oil Prices - A. Abdul Azizurrofi ^{1*} , Y. Setya Buana ¹ , I. Taufik Sutanto ¹ , A. Bayu Prasaja ¹ ¹ SKK Migas		

13:10	Predicted Stratigraphy: A Case Study from the Sureste Basin (Gulf of Mexico) - P. Kiss ^{1*} , J. Clayton ¹ , J. Cullum ¹ , W. Lee ¹ , U. Akram ¹ ¹ CGG
	A deep learning seismic processing framework based on pre-training: giving the dataset the attention it needs - T. Alkhalifah ^{1*} , R. Harsuko ¹ ¹ KAUST
	Case Study: Predicting Missing Well Logs using Classification and Regression Methodology - R. Thiyagu ^{1*} , A. Ahmadiashgaftaki ² , S. Talib ² , M.Y. Mohamat Yatim ⁴ , M.N. Mat Asri ³ ¹ Independent; ² Universiti Malaya; ³ UTP Universiti Teknologi PETRONAS; ⁴ Emerson
	3DMadNex AI: New Digital Tool for Operational Geology Virtual Assistance and its Deployment in Middle East - P. Coraci ¹ , F. Di Maggio ¹ , R. Lopez ¹ , F. Porcelli ¹ , R. Sabatino ¹ , F. Marchini ¹ , A. Di Palo ¹ , S. Pianaro ¹ , A. Crottini ¹ , M. Pirrone ¹ , F. Chinellato ¹ , M. Pelorosso ¹ , P. Temponi ^{1*} , C. Sanasi ¹ ¹ ENI E&P
	Do not make the Cloud a landfill for your subsurface data - P. Gibb ^{1*} ¹ Petrosys Europe Ltd.
	A machine learning methodology to forecast well production: illustration with the Volve dataset - B. Auffray ^{1,2*} , T. Duval ¹ , G. Suzanne ¹ , M. Feraille ² ¹ Beicip-franlab; ² IFPEN
	Orchestrating Coepetition in the Development of OSDU Data Platform - M. Moradi ^{1*} ¹ NTNU
	Extracting seismic outliers using GAN-like training of autoencoders. - E.B. Myklebust ^{1*} , T. Stangeland ¹ ¹ Norsar
	Creating a national data asset: Detailing the Digitalization of the UK's National Data Repository - J. Nicholson ^{1*} , C. Jones ¹ , J. Selvaige ¹ , A. Thompson ² ¹ Osokey Ltd.; ² North Sea Transition Authority
	Application of Machine Learning in Integrated Modeling of the Oil and Gas Fields - K. Pechko [*] , A. Afanasyev, N. Brovin, E. Belonogov, M. Simonov
	Can Machine Learning (ML) be used in log analysis to search for Missed or Overlooked Pay? - C.F. Gyllenhammar ^{1*} ¹ CaMa GeoScience AS

INNOVATION HUB		MAIN STAGE	
Strategic Session 2		Project Prospects Session Chair: S. Roy (SLB)	
14:10	Case Story - Startup innovation culture & strategy - D. Austin ¹ ¹ ESA	14:10	Well Control Optimization using Smart Proxy Models - A. Jahanbani Ghahfarokhi ^{1*} , A. Chaturvedi ² ¹ NTNU (Norwegian University of Science and Technology); ² DNO Norge AS
14:30	Case Story - Addressing innovation challenges through diversity and inclusivity - M. Gupta ¹ ¹ Shell	14:30	Seismic Tiles, a data format to enable analytics on seismic by digitalization of G&G logic - Ø.M. Skjæveland ^{1*} , S. Torset ¹ , C.C. Nilsen ² ¹ Equinor; ² Norwegian Computing Center
14:50	Interactive Session - Accelerating the pace of energy innovation - J. Allyn ¹ , M. Jensen ² , M. Stäuble ¹ , J. Aguas ³ , S. Navasivayam ⁴ ¹ Studio X; ² SLB; ³ AWS; ⁴ TGS	14:50	Three-phase flow reservoir simulation approximation and acceleration using U-shaped Fourier neural operator (U-FNO) - G. Shishaev ^{1*} , V. Bulatov ¹ , M. Salnikov ¹ , A. Vetkina ¹ ¹ Independent Researcher
		15:10	Borehole Image Logs: New approaches to automated surface, breakout and facies interpretation - J. Dietz ^{1*} , H. Wang ¹ , S. Hou ¹ , E. Jarvis ¹ , R. Sekti ¹ ¹ CGG Services (UK) Limited
15:30	Coffee Break		
Digital Transformation Session Chairs: D. Tishechkin (AWS), A. Dubovik (Data Analysis Center)		ML in Seismic Interpretation Session Chair: D. Norton (AFL)	
15:55	Analogue identification and evaluation for field development planning - R. Vhanamane ¹ , G.S. Shergill ¹ , D. Lucas-Clements ^{1*} , P. Webber ² ¹ SLB; ² S & P Global	15:55	Fully automatic procedure of fault surfaces detection - A. Kozhevnikov [*] , S. Tsimfer
16:15	Accelerating decision making with automated QC workflows for full-waveform inversion - D. Halliday ^{1*} , S. Roy ¹ , D. Kulakov ¹ , J. Wu ¹ , A. Billa ¹ , J. Xu ¹ , M. Elbadry ¹ , R. Bloor ¹ ¹ SLB	16:15	Exploring the Potential of Denoising Diffusion Probabilistic Models for Generating Realistic Geological Rock Thin Section Images - R. Perez ^{1*} ¹ University Of Vienna
16:35	Productization of Digital Transformation in the Subsurface - C. Hanton ^{1*} ¹ Ikon Science	16:35	Machine learning application for joint rock-physics model optimization, facies classification and compaction modeling: North Sea Example - R. Filograsso ^{1*} , A. Mur ¹ , R. Beloborodov ² , M. Pervukhina ² ¹ Ikon Science; ² CSIRO
16:55	Data Foundations: Unlocking the Potential of Subsurface Machine Learning Workflows - J. Tomlinson ^{1*} , S. Edmond ¹ ¹ Ikon Science	16:55	Prediction of Bedrock Depth in Complex Mining Areas using Machine Learning Algorithms - A. Najafabadipour ^{1*} , S. Najafabadipour ² ¹ Shahid Bahonar University of Kerman; ² Allameh Tabataba'i University
		17:15	Rock property prediction ahead of the drilling bit using Dynamic Time Warping and Machine Learning regression - A. Christ ^{1*} , A. Bouziat ¹ , C. Cornet ¹ , Y. Djemame ² , J. Fortun ² , J. Lecomte ¹ , A. Meunier ² , P.N.J. Rasolofosaon ¹ ¹ IFP Energies nouvelles; ² Perenco
EXHIBITION FLOOR			
17:35	Networking Reception		
19:35	End of Day 1		

INNOVATION HUB		MAIN STAGE	
08:30 Welcome Coffee			
Plenary Day 2			
09:00 Welcome Day 2			
09:05 Keynote Presentation - Digital workflows of the future on Johan Sverdrup - S. Nordfjord ^{1*} ¹ Equinor			
09:25 Keynote Presentation - Accelerating geoscience learning through digital tools - M. Cyrot ^{1*} ¹ TotalEnergies			
09:45 Panel Discussion - The integration of the subsurface and the surface data domains - M. Wynne (moderator) ¹ , M. Rae ² , P. Kelly ³ , B. Foubert ⁴ , A.C. Ramirez ⁵ ¹ S&P Global Commodity Insights; ² Shell; ³ The Open Group; ⁴ SLB; ⁵ TGS			
10:45 Coffee Break			
Strategic Session 3		OSDU Use-cases Session Chair: G. O'Brien (Microsoft)	
11:10 Roundtable Discussion - Addressing the urgency in redefining our business models - K. Dehghan ¹ , F. Darbyshire ² , L. D'Angelo ³ , T. Ziegler ⁴ , M. Quinquet ⁵ ¹ TotalEnergies; ² Shell; ³ Eniverse Ventures; ⁴ PGS; ⁵ AspenTech	11:10 OSDU journey in TotalEnergies: from concept to operational deployment - T. Akimova ^{1*} , B. Joudet ¹ , E. Katimbo ¹ , M. Nsamba ¹ , P. MUNGUJAKISA ¹ , D. LINGO ¹ ¹ TotalEnergies		11:30 Futureproofing Rich Metadata File Ingestion with OSDU - T. Hewitt ^{1*} , R. Gadrabouh ¹ ¹ CGG
	11:50 Roundtable Discussion - Are we pushing the envelope on digital innovation? - K. Stevens ¹ , S. Harault ² , E. Ewig ³ , J. Brady ⁴ , S. Sanderson ⁵ ¹ Shearwater; ² Pegasystems; ³ PGS; ⁴ Baker Hughes; ⁵ AWS	11:50 Visualize OSDU™ Data with Geospatial Consumption Zone and No Code Maps - B. Boulmay ^{1*} , Y. Gubanov ² , D. Tishechkin ² ¹ Esri; ² Amazon Web Services	
12:30 Networking Lunch			
Strategic Session 4		Applied Analytics Session Chair: D. Norton (AFL)	
13:10 Case Story - Exploration Digitalization: from Ideation to rollout - Q. van de Laarschot ^{1*} ¹ Shell	13:10 AUTO Channel: AI-driven Automatic Channel Scalar Correction - C. Sutton ^{1*} , Y. Sang ² , W. Pan ² , P. Webster ¹ , J. Chen ² , M. Sidahmed ² ¹ Shell International Exploration and Production; ² Shell Global Solutions (US) Inc.		13:30 Information Retrieval from Oil and Gas Unstructured Data with Contextualized Framework - M.X. Lee ^{1*} , M. Marlot ¹ ¹ SLB
13:30 Case Story - AI Digitalization to Commercial Scale - E. Naeini ^{1*} ¹ C3 AI	13:50 A Simple Machine-Learning Approach for the Discovery of Digital Subsurface Geoscience Analog Data - S. Sheyh Husein ^{1*} , R. Vhanamane ² , A. Laake ¹ , F. Stabel ³ , M. D' Souza ³ ¹ SLB Aachen Technology Center; ² SLB Abingdon Technology Center; ³ SLB Norway Technology Center		14:10 Evaluation of the influence of structural parameters on induced polarization effect using the process-based method - M. Ma ^{1*} , J. Zhao ¹ , B. Wang ¹ , B. Yan ¹ , M. Ye ¹ ¹ China University of Petroleum (Beijing)
Data Management Session Chairs: C. Jones (S&P Global Commodity Insights), T. Hewitt (CGG)		Natural Language and Document Processing Session Chair: S. Roy (SLB)	
14:30 Shell's Road to a new Subsurface & Wells Digital Ecosystem – thoughts halfway along the journey - P. Zeppenfeldt ^{1*} ¹ SHELL	14:30 Transformers for Site Assessment for Carbon Capture and Sequestration using Legacy Well Data - Y. Mathur ¹ , J. Chen ¹ , I. Folmar ² , Z. Dong ¹ , Q. Su ^{3*} , L. Lu ² , M. Sidahmed ¹ ¹ Shell Global Solutions US Inc.; ² Shell International Exploration & Production Inc.; ³ Shell Information Technology International		14:50 Automated extraction of images of interest in document collections: end-to-end workflow and operational case-study - M.T. Nguyen ^{1,2*} , C. Cornet ² , L. Mattioni ² , A. Bouziat ² , G. Rumbach ³ ¹ BeicipFranlab; ² IFP Energies nouvelles; ³ Vermilion Energy
14:50 High-efficient cloud seismic data solution for real-time geosteering optimization - A. Zaputlyayeva ^{1*} , A. Van Welden ² , I. Kuvaev ¹ ¹ ROGII Inc; ² Bluware	15:10 Topological analysis of production data for extracting valuable information - A. Vetkina [*] , G. Shishaev ¹ ¹ Heriot-Watt University		15:10 Natural Language Processing for Key Geology Information Detection and Geological Description classification - H. Blondelle ^{1*} , O. Nguyen-Thuyet ¹ ¹ Agile Data Decisions
15:30 Coffee Break			

INNOVATION HUB		MAIN STAGE	
Workshop		Dedicated Session - Bringing OSDU into Operations	
15:55	Seismic 3D Visualisation and Facies Recognition	15:55	OSDU a gamechanger for our industry - K. Ogreid ^{1*} ¹ AkerBP
		16:05	The OSDU based knowledge layer in an Energy Data Mesh - M. van der Haven ^{1*} ¹ CGI
		16:15	From Paper Chase to digital bonanza: Unlocking the Value of "What" and "Where" to Predict CCS Potential using Scientific Data - J. Skero ^{1*} ¹ Elsevier
		16:25	OSDU as an enabler to compete in a changing world - J. Elgenes ^{1*} ¹ Equinor
		16:35	Leveraging digital transformation to accelerate operational performance and lower-carbon pathways - G.M. McEwan ^{1*} ¹ SLB
		16:45	OSDU Data Platform - Key Enabler for TotalEnergies Digital Transformation - T. Akimova ^{1*} ¹ TotalEnergies
		16:55	Transforming Subsurface Data Management Workflows – S. Mackie ^{1*} ¹ Wintershall Dea
19:00	Conference Dinner		
22:00	End of Day 2		



INNOVATION HUB		MAIN STAGE	
08:30 Welcome Coffee			
Plenary Day 3			
09:00 Welcome Day 3			
09:05		Keynote Presentation - Demystifying Digitalization - J. Allyn ^{1*} ¹ Studio X	
09:25		Keynote Presentation - Digital Accelerating Global Decarbonization - S. Freeman ¹ ¹ SLB	
09:45		Panel Discussion - The role of digital in future energy system integration - M. Wynne (moderator) ¹ , H. Smyth ² , F. Despinois ³ , G. O'Brien ⁴ , G. Gueritz ⁵ ¹ S&P Global Commodity Insights; ² Halliburton; ³ TotalEnergies; ⁴ Microsoft; ⁵ NVIDIA	
10:45 Coffee Break			
Strategic Session 5		ML for Seismic Domain II Session Chair: A. Karagul (TotalEnergies)	
11:10		Case Story - Energy Ecosystems - J. Schoolmeesters ^{1*} ¹ TGS	
11:30		Case Story - Addressing the CCUS challenges and opportunities through an integrated asset modeling approach - R. Hernandez ¹ ¹ AspenTech	
11:50		Roundtable Discussion - Digital opportunities in energy transition - K. Abdeli-Galinier ¹ , C. Vos ² , A. Fahimuddin ³ , S. Muralidharan ⁴ , E. Rees ⁵ ¹ SLB; ² Shell; ³ Cognite; ⁴ AWS; ⁵ Halliburton	
		11:50 Digital Core Based Pore Structure Characterization and Rock Physics Modeling of Carbonate Reservoir - B. Yan ^{1*} , J. Zhao ¹ , B. Wang ¹ , M. Ma ¹ , Y. Sun ¹ ¹ China University of Petroleum (Beijing)	
		12:10 Automating the interpretation of 715 000 drill cuttings samples with active learning - D. Evans ^{1*} , E. Larsen ² ¹ Rockwash Geodata Ltd; ² Earth Science Analytics	
12:30 Networking Lunch			
Strategic Session 6		Green Digitalization Session Chair: F. Odinsen (Microsoft)	
13:10		Case Story - Upskilling and reskilling existing workforce for digital and net zero future - J. Hudson ^{1*} ¹ AI for People and Learning	
13:30		Case Story - Increasing digital capabilities in modern geoscience education - C. John ^{1*} ¹ Imperial College London	
13:50		Interactive Session - Digital innovation and the path for a net zero future	
		13:50 Predicting geologic CO2 storage and plume evolution from sparsely available well data using Barlow Twins - C.A.S. Ferreira ^{1*} , T. Kadeethum ² , H.M. Nick ¹ ¹ Technical University Of Denmark; ² Sandia National Laboratories	
		14:10 Revisiting Induced Seismicity in Groningen Field Using 3D CNN - R. Perez ^{1*} ¹ Independent	
Machine Learning for Subsurface Applications Session Chair: Q. van de Laarschot (Shell)		Digital Solutions for Wind Farms Session Chairs: D. Tishechkin (AWS), A. Dubovik (Data Analysis Center)	
14:30		Flowify: simple and non-technical user interface for workflows managements with reusable components - O. Nilsson ^{2*} , L.P. Turchan ² , A.T.K. Cheng ¹ ¹ Equinor ASA; ² Bluware Inc	
14:50		Give Geological Context to Seismic Attributes Through Artificial Intelligence, Using Neural Style Transfer - R. Perez ^{1*} ¹ Independent	
15:10		A Geophysics Library of Trained Machine Learning Models - A. Huck ^{1*} , P. De Groot ¹ , H. Refayee ² ¹ dGB Earth Sciences; ² de Groot-Bril Earth Sciences LLC	
15:30		Using machine learning property modeling with assisted forward stratigraphic modeling for offshore wind farm site characterization - A. Ahmad ^{1*} , K. Eder ¹ , S. Courtade ¹ ¹ SLB	
		15:50 An integrated workflow for windfarm site characterization by deep learning - H. Di ^{1*} , A. Abubakar ¹ ¹ SLB	
		15:10 AWS solutions for new energy wind solar farm management - N. Ma ^{1*} ¹ AWS	
15:30 Coffee Break			
Dedicated Session			
15:55		How Digital Can Be the Key to Successful Carbon Capture & Storage (CCS) and Energy Transition - D. Rowan ¹ , D. Austin ² , M. Sola ³ , E. Skjetne ⁴ , I. Setterfield ⁵ ¹ SLB; ² Earth Science Analytics; ³ Horisont Energi; ⁴ Northern Lights; ⁵ LYTT	
17:10 Closing Remarks and EAGE Digital 2024 Introduction			
17:15 End of the Conference			

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