

POSTCONVENTION WORKSHOP

W-4: Distributed Fiber-Optic Sensing: Advances in Applications and ML-based Techniques

George R. Brown Convention Center, Room 360A

Start	Stop	Presentation	Speaker	Affiliation
8:30 AM	8:35 AM	Introduction	Vladimir Kazei/Ge Jin	Aramco/Colorado School of Mines
		Session 1		
8:35 AM	8:55 AM	All three slices of the Pie: The value of fiber withing the Atlantis field	Sam Buist	BP
8:55 AM	9:15 AM	Passive/active seismic monitoring using a multi-well DAS array documented a fault reactivation by two small CO2 plumes	Stanislav Glubokovskikh	LBL
9:15 AM	9:30 AM	DAS RCN instrumentation working group	Kasey Aderhold	Earthscope
9:30 AM	9:50 AM	Panel Discussion		
9:50 AM	10:00 AM	Break		
		Session 2		
10:00 AM	10:09 AM	Verification of DAS Systems for Permanent Surveillance: From Earthquake Seismology to Induced Seismicity	J. Andres Chavarria	Optasense
10:09 AM	10:18 AM	Acquiring and Processing Deep Dual-Well DAS Walkaway VSP in a Desert Environment	Andrey Bakulin/Ali Shaiban	Saudi Aramco
10:18 AM	10:27 AM	Advancing Understanding of Hydraulic Fracture Tip Advancement through Inversion of Low-Frequency Distributed Acoustic Sensing Data	Yongzan Liu	SLB
10:27 AM	10:36 AM	Microseismic source localization using Fourier Neural Operators: Application to DAS microseismic data	Umair bin Waheed	KFUPM
10:36 AM	10:54 AM	Panel Discussion		
10:54 AM	11:03 AM	Distributed acoustic sensing for subsea exploration: Case studies using impulsive seismic sources, whales and shear-wave resonances	Kittinat Taweestananon	NTNU
11:03 AM	11:12 AM	Deep learning-based DAS to geophone conversion	Lei Fu	Aramco Americas
11:12 AM	11:21 AM	Bringing Distributed Magnetic Sensing from the Lab to the Field	Shihao Yuan	CSM
11:21 AM	11:30 AM	3D Installation of fiber cables for Acquiring 3C DAS Array Data	Yingping Li	BlueSkyDas

11:30 AM	11:39 AM	Maximizing imaging resolution of DAS VSP data using FWI and FWI imaging	Ge Zhan	TGS
11:39 AM	12:00 PM	Panel Discussion		
12:00 PM	1:30 PM	Lunch Break		
1:30 PM	1:40 PM	Introduction	Bob Clapp/Mauricio Araya	Stanford University/TotalEnergies
1:40 PM	2:10 PM	Transferability of trained models to different DAS settings and applications	Page Given	Stanford University
2:10 PM	2:35 PM	Interpreting DAS ambient recording inside a constructing tunnel	Karl Gelinsky	Purdue University
2:35 PM	3:00 PM	Machine Learning-Based Microseismic Event Location and Moment Tensor Estimation Using Surface Distributed Acoustic Sensing Data	Jaewoo Kim	TotalEnergies
3:00 PM	3:10 PM	Break		
3:10 PM	3:35 PM	Generalized machine learning model for passive seismic processing	Ivan Lim Chen Ning	Chevron
3:35 PM	4:00 PM	Seismic Arrival-time Picking on Distributed Acoustic Sensing Data using Semi-supervised Learning	Weiqliang Zhu	Berkeley University
4:00 PM	4:25 PM	Moving to the edge: Approaches for real-time microseismic characterization using DAS in EGS	Jonathan Ajo-Franklin	Rice University
4:25 PM	5:00 PM	Panel Discussion - Q&A Session	Bob Clapp	Aramco