

POSTCONVENTION WORKSHOP

W-6: Distributed Fiber-Optic Sensing (DFOS): New Frontiers in Geophysical Applications

George R. Brown Convention Center, Room 360A

Start	Stop	Presentation	Speaker	Affiliation
8:30 AM	8:35 AM	Introduction		
		Session 1: Instrumentation and Coupling		
8:35 AM	8:50 AM	Investigating Environmental Impacts on DAS Performance during Controlled Irrigation in Reno, Nevada	Sara Sayyadi	University of Nevada, Reno
8:50 AM	9:05 AM	Bridge Health Monitoring Based on Distributed Optical Fiber Sensing	Pengchao He	Colorado School of Mines
9:05 AM	9:20 AM	DAS Inside Casing Coupling Effects: Elastic Simulations and Upscaling Feasibility	Nour Alzamil	Saudi Aramco
9:20 AM	9:50 AM	Fiber Optic Seismic Vector and Acoustic Sensor and Sensor Systems for Borehole Seismic High-Resolution and High-Temperature Applications	Bjorn Paulsson	Paulsson, Inc.
9:50 AM	10:05 AM	Panel Discussion		
10:05 AM	10:15 AM	Break		
		Session 2: Edge Computing, ML and AI		
10:15 AM	10:30 AM	Intelligent Fiber Sensing: AI & Deep Learning Powered, Hardware-Agnostic Real Time CCS Well Monitoring	Safil Sunny	Tranzmeo
10:30 AM	10:45 AM	AI-Driven Distributed Acoustic Sensing (DAS): Real-Time and Cloud-Based Inflow Profiling and Leak Detection Without Intervention	Aleksei Andriianov	Precise DHS
10:45 AM	11:15 AM	How smart sampling and streamlined tools helped us build fast, automated, real-time AI systems for analysing TBs of DAS data	Ayush Goyal	Lightscline
11:15 AM	11:45 AM	Locating Geothermal-induced Microearthquakes using DAS and Machine Learning: Application to Utah FORGE 2022 stimulations	Pengliang Yu	Penn State University
11:45 AM	12:00 PM	Panel Discussion		
12:00 PM	1:30 PM	Break		
		Session 3: Enhanced Geothermal Monitoring		
1:30 PM	2:00 PM	Results from the FOGMORE@Utah FORGE Project: Application of an integrated HT DFOS system for characterizing and monitoring EGS development	Jonathan Ajo-Franklin	Rice University

2:00 PM	2:30 PM	Continuous seismic monitoring of fractures and faults in enhanced geothermal systems: lessons and experience using distributed acoustic sensing and permanent seismic sources	Julia Correa	LBNL
2:30 PM	3:00 PM	Illuminating the Subsurface: DAS for Safer and Smarter EGS	Sireesh Dadi	Fervo Energy
3:00 PM	3:10 PM	Break		
		Session 4: Fracture and Faults Characterization		
3:10 PM	3:40 PM	Induced earthquake source parameter estimation using downhole DAS at the Cape Modern geothermal field	Hilary Chang	Massachusetts Institute of Technology
3:40 PM	4:10 PM	Large-Scale Bedding Plane Slippage and Its Impact on Hydraulic Fracturing: Integrated Analysis from Field Observations in the Eagle Ford and Austin Chalk Formations	Ge Jin	Colorado School of Mines
4:10 PM	4:40 PM	Tracking Aseismic Fault Slip with Downhole Fiber Optics and a High-Precision Strain Analyzer	Stas Glubokovskikh	LBNL
4:40 PM	4:55 PM	Panel Discussion		
4:55 PM	5:00 PM	Adjourn		