CREWES Annual Meeting 2024 - Technical Program - Day 1
Dec 5 2024

Time	Session	Moderator	Title	Speaker
8:40AM	WELCOME		Opening remarks	*Kris Innanen, Pierre Kennepohl*
9:00AM	ACQ-DAS-LAB	Kris Innanen	Physical modelling over a fluid injection model: 4D acquisition and preliminary analysis	*Kevin Bertram*
9:20AM			Optimizing seismic survey design for FWI: a study using physical modelling data and an industry software package	*Christina Schumacher*
9:40AM			Geometrical model for the "Croissant" 6C multi-component DAS sensor	*Carla Acosta*
10:00AM			COFFEE	
10:30AM			9C DAS acquisition on the Pretzel and Croissant multi-component sensors	*Kevin Hall*
10:50AM			Unsupervised DAS noise attenuation via double INR networks	*Ji Li*
11:20AM			Mapping Distributed Acoustic Sensing (DAS) fiber depths with a transformer model	*Arvin Karpiah*
11:40AM			Time-lapse nullspace shuttles: VSP vs surface acquisition, shuttling to zero, and sparse monitoring prospects	*Kim Pike*
12:00PM			LUNCH	
1:30PM	CO2-NM-TL	Don Lawton	CO_2 monitoring at the CMC Newell County Facility: update and progress	*Don Lawton*
1:50PM			Programming an Ising computer for seismic tomography	*Kris Innanen*
2:10PM			Simultaneous inversion for velocity and vector reflectivity based on a Recurrent Neural Network	*Xiaohui Cai*
2:30PM			COFFEE	
2:50PM			Neural networks for multiphysics inversion	*Tianze Zhang*
3:10PM			Model entropy constraints in multi-parameter FWI: a promising tool for timelapse FWI	*Anton Ziegon*
3:30PM			Time-lapse FWI of the Snowflake VSP data	*He Liu*
3:50PM			Creating a CREWES geophysical chatgpt copilot	*Marcelo Guarido*
4:10-5:45PM			POSTER SESSION & Demos	

CREWES Annual Meeting 2024 - Technical Program - Day 2
Dec 6 2024

Time	Session	Moderator	Title	Speaker
8:30AM	3DFWI-UQ	Kris Innanen	4D synthetic time-lapse FWI experiments for CO_2 monitoring configured for the Snowflake dataset	*Jinji Li*
8:50AM			Surface wave dispersion analysis and inversion from 3D complex land seismic exploration data	*Ivan Sanchez*
9:10AM			3D time domain RNN-based FWI with an effective boundary method	*Tianze Zhang*
9:30AM			Pseudo-3D elastic FWI: structurally-coupled inversions of intersecting 2D planes	*Anton Ziegon*
9:50AM			COFFEE	
10:30AM			Hamiltonian Monte Carlo and Stein Variational Gradient Descent in the context of timelapse VSP	*Jinji Li*
10:50AM			Time domain FWI imaging in acoustic variable-density media	*Ziguang Su*
11:10AM	ML-DSI-CMP	Daniel Trad	Computational frameworks for modelling, migration and inversion	*Daniel Trad*
11:30AM			Seismic data denoising through a diffusion model	*Ji Li*
11:50AM			LUNCH	
1:20PM			Intelligence chat copilot app for well-log processing and analysis	*Marcelo Guarido*
1:40PM			Stratigraphy and its influence on seismic waveforms	*David Emery*
2:00PM			A comparison of FWI uncertainty quantification methods: conventional versus machine learning	*Tianze Zhang*
2:20PM			COFFEE	
3:00PM			Using Fourier Neural Operators to generate multi-resolution seismic wavefields	*Angel Hernandez*
3:20PM			Analyzing varying fault offset rates on the Juan de Fuca plate using cross-correlation	*Rob Perrin*
3:40PM	Invited Talk		Boolean logic and machine learning	*Brian Russell*
4:00PM			WRAP-UP	

ACQ-DAS-LAB	Acquisition and field methods, DAS, lab results
CO2-NM-TL	CO2, novel methods, time-lapse
3DFWI-UQ	3D FWI and uncertainty quantification
ML-DSI-CMP	Machine learning, data science and computation