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			FWI of the physical modelling facility channel model data	*Xiaohui Cai*
10:00AM			COFFEE	
10:30AM			Geometrical model for the "Croissant" 6C multi-component DAS sensor	*Carla Acosta*
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			Physical modelling over a fluid injection model: 4D acquisition and preliminary analysis	*Kevin Bertram*
12:00PM			LUNCH	
1:30PM	CO2-FWI-TL	Don Lawton	CO2 monitoring at the CMC Newell County Facility: update and progress	*Don Lawton*
1:50PM			Regularization of full waveform inversion from a clustering and embedding perspective	*Kris Innanen*
2:10PM			Time-lapse nullspace shuttles: VSP vs surface acquisition, shuttling to zero, and sparse monitoring prospects	*Kim Pike*
2:30PM			COFFEE	
2:50PM			Angle-dependent reflectivity in acoustic with density time-domain FWI	*Ziguang Su*
3:10PM			Model entropy constraints in multi-parameter FWI: a promising tool for timelapse FWI	*Anton Ziegon*
3:30PM			Analyzing varying fault offset rates on the Juan de Fuca plate using cross-correlation	*Rob Perrin*
3:50PM			Time-lapse FWI of the Snowflake VSP data	*He Liu*
4:10-5:45PM			POSTER SESSION	

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

Time	Session	Moderator	Title	Speaker
8:30AM	3DFWI-UQ	Kris Innanen	3D frequency-domain acoustic full waveform inversion	*Jinji Li*
8:50AM			3D S-wave velocity model estimation using surface wave dispersion inversion from 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			A comparison of FWI uncertainty quantification methods: conventional versus machine learning	*Tianze Zhang*
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			DAS data denoising method with machine learning diffusion model	*Tianze Zhang*
2:20PM			COFFEE	
3:00PM			Using physics-informed neural operators to learn the 2D elastic wave equation	*Angel Hernandez*
3:20PM			Creating a CREWES geophysical chatgpt copilot	*Marcelo Guarido*
3:40PM	Invited Talk		Chirps and sweeps	*Brian Russell*
4:00PM			WRAP-UP	

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