

Annual Affiliates Meeting Agenda

Tuesday, November 19, 2024

Oak Room, Tresidder Student Union, Stanford University

*All times are in Pacific Time Zone

8:30 - 9:00 am

Breakfast and Registration

9:00 - 9:15 am

Welcoming Remarks - Sarah Saltzer, Stanford University

9:15 - 10:00 am

Session 1: Under Pressure

Elliot Kim: Assessment of CO₂ Leakage into USDW during CCS Project Operations

Alice Nuz: Inverse modeling of pressure data to predict CO₂ saturations using ML

Hemanth Harihanan: Parametric analysis of the AoR using CCSNet

10:00 - 10:15 am

Break

10:15 - 11:00 am

Session 2: Can't Shake This Off

Xiaowen He: Data-space Inversion for Prediction of Fault Slip Tendency in CO₂ Storage

Oluwatobi Raji: Optimization to minimize fault activation

Arjun Kohli: 3D seismic hazard assessment for a potential CO₂ storage site in Kern Co., CA

11:00 - 11:15 am

Break

11:15 - 12:05 pm

Session 3: California Dreamin'

Sarah Saltzer: SCCS California Activity Update - CalCCS

Samuel Desai: A Geospatial Dashboard for Carbon Storage Transparency

Tony Kavscek: A ViSuaLizer (VSUL) for Demonstration of CCS Dynamics

Rudraksh Mohapatra: Ordinal regression analysis for probabilistic ranking and identification of carbon storage sites in California

12:05 - 1:05 pm

Lunch

1:05 - 2:50 pm

Session 4: CCS at Work Down Under- GeoCquest Field Validation

Sally Benson: Overview of GeoCquest and Field validation project

Oleg Volkov: Simulation of GFV models using GEOS

Catherine Callas: Probabilistic plume migration prediction using ML

Aman Raizada: Pulsed-Neutron Logging for gas saturation monitoring in highly heterogeneous rock formations

Issac Ju: Learning CO₂ plume migration in faulted reservoirs with Graph Neural Networks

Haoyu Tang: Graph Network Surrogate Model for Optimizing the Placement of Horizontal Injection Wells for CO₂ Storage

Catherine Spurin: GeoCquest Field Validation project: the role of heterogeneity of CO₂ trapping in core scale experiments

2:50 - 3:05 pm

Break

3:05 - 4:05 pm

Session 5: I'll Be Watching You - MMV

Yifu Han: Surrogate Model for Coupled Flow-Geomechanics and Its Use in Hierarchical Markov Chain Monte Carlo History Matching

Nanzhe Wang: Deep Learning Framework for History Matching CO₂ Storage with 4D Seismic and Monitoring Well Data

Dylan Crain: Illinois Storage Corridor - Enhanced Framework for Monitoring and History Matching

Wenchao Teng: Sequential monitoring design for geological carbon storage

4:05 - 4:30 pm

Geos Update: Herve Gross, Sr. R&D Project Manager, Total Energies

4:30 - 5:00 pm

Discussion & Closing Remarks: Sarah Saltzer, Stanford University

5:00 - 6:00 pm

Poster Session and Reception