

POSTCONVENTION WORKSHOP

W-14: Subsurface Uncertainty Description and Estimation – Moving Away from Single Prediction with Distribution Learning

George R. Brown Convention Center, Room 371

Start	Stop	Presentation	Speaker	Affiliation
1:30 PM	1:40 PM	Introduction/Phone Survey	Felix Herrmann	Georgia Institute of Technology
1:40 PM	2:10 PM	Describing states of knowledge using variational probabilistic inference	Andrew Curtis	University of Edinburgh
2:10 PM	2:40 PM	Mixture Density Networks: centauristics or scientific machine learning?	Anar Yusifov	bp
2:40 PM	3:00 PM	Inference networks as the frame to combine well-known physics and machine learning	Miquel Bosch	Info Geosciences
3:00 PM	3:20 PM	Subsurface uncertainty quantification with deep geologic priors: A variational Bayesian framework	Brent Wheelock	ExxonMobil
3:20 PM	3:35 PM	Break		
3:35 PM	3:55 PM	A ML based approach for Seismic Interpretation Uncertainty Analysis in Complex Subsalt Settings	Arvind Sharma	Schlumberger
3:55 PM	4:15 PM	Reliable amortized variational inference with conditional normalizing flows via physics-based latent distribution correction	Ali Siahkoobi	Georgia Institute of Technology
4:15 PM	5:00 PM	Panel Discussion		