

POSTCONVENTION WORKSHOP

W-18: Understanding Uncertainty Quantification in FWI: Its Value and Impact

George R. Brown Convention Center, Room 361B

Start	Stop	Presentation	Speaker	Affiliation
1:30 PM	1:35 PM	Introduction		
		Session 1		
1:35 PM	2:00 PM	3D Bayesian Full Waveform Inversion at the Cost of Multiple Conventional FWI's - Keynote Speaker 1	Andrew Curtis* and Xuebin Zhao	University of Edinburgh
2:15 AM	2:15 AM	A gradient-based Null space shuttling algorithm and its application to 4D FWI and AVO inversion	Esteban Díaz*, Jinfeng Zhang, Simon Luo, Madhav Vyas, and Ganyuan Xia, BP	bp
2:15 PM	2:30 PM	Brazil Development Pre Salt – FWI Scenario Uncertainty	Odette C. Aquino de Aragao*, Christian Theriot, Jaydip Guha, Cody Stewart, Tim Fox, Wenceslau Gouveia	Shell International E & P
2:30 PM	2:45 PM	Attention Please: Getting the Most from CIGs with Learned Summary Statistics	*Felix J. Herrmann, Shiqin Zeng, Yunlin Zeng, Tuna Erdinc, and Abinav Gahlot	Georgia Institute of Technology
2:45 PM	3:10 PM	Panel discussion I		
3:10 PM	3:25 PM	Break		
		Session 2		
3:25 PM	3:50 PM	Evaluation of methods for uncertainty quantification in full waveform inversion - Keynote Speaker 2	Mrinal K Sen*, Zeyu Zhao, and Shuhua Hu	University of Texas at Austin
3:50 PM	4:05 PM	Uncertainty Quantification in Time-lapse Full-waveform Inversion Using Hamiltonian Monte Carlo	Haipeng Li*, Robert Clapp and Biondo Biondi	Stanford University
4:05 PM	4:20 PM	Uncertainty Quantification in Full-Waveform Inversion Using Generative Models and Stein Variational Gradient Descent	Tariq Alkhalifah*, Hasyim Taufik, and Randy Hasuko	King Abdullah University Of Science And Technology
4:20 PM	4:35 PM	Towards Reliable 4D Full Waveform Inversion: A Study on Uncertainty Quantification	Fuchun Gao*, Carlos Calderon, Faqi Liu, Yiran Huang**	*TGS; **Brown University
4:35 PM	5:00 PM	Panel discussion II and Adjourn		