

Texas Consortium for Computational Seismology

Eleventh Bi-Annual Research Meeting

Wednesday, April 13, 2016		
8:00–8:30	Coffee and pastries	
8:30–9:00	Sergey Fomel	Introduction
9:00–12:00	Morning session: <i>Data Processing and Seismic Interpretation</i>	
	Xinming Wu (CSM) Dmitrii Merzlikin Kelly Regimbal Karl Schleicher	Data processing for 3D seismic interpretation Diffraction imaging using azimuthal PWD High-resolution recursive stacking Seismic data processing workshops
12:00–1:00	Lunch	
1:00–5:00	Afternoon session: <i>Nonstationary Filters</i>	
	Sergey Fomel Rui Zhang (UL Lafayette) Guoning Wu (CUP Beijing)	Streaming prediction-error filters Time-variant wavelet extraction Data-driven time-frequency analysis
	Afternoon session: <i>Nonstationary Filters and Full Waveform Inversion</i>	
	Hejun Zhu (UT Dallas) Zhiguang Xue Seungbum Koo	FWI using adaptive matching filters FWI using smoothing kernels Time-reversal focusing of seismic wave energy
5:30–8:30	Wine reception and dinner at Pappadeaux Seafood Kitchen	

Thursday, April 14, 2016		
8:00–8:30	Coffee and pastries	
	Morning session: <i>Data Registration in Full Waveform Inversion</i>	
	Bjorn Engquist Yunan Yang	Mathematics of misfit functions used in FWI Convexity of the quadratic Wasserstein metric
	Morning session: <i>Data Registration in 4D Seismic</i>	
	Parvaneh Karimi Mason Phillips Sarah Greer	Time-lapse registration in stratigraphic coordinates Time-lapse registration using scaled PWD Matching high-resolution and legacy seismic data
12:00–1:00	Lunch	
1:00–5:00	Afternoon session: <i>Elasticity and Anisotropy</i>	
	Junzhe Sun Yanadet Sripanich Xufei Gong (CUP Qingdao) Jie Yao (U Houston)	Lowrank elastic wave extrapolation Muir-Dellinger anisotropic parameterization Multicomponent statics corrections Solving fractional Laplacian viscoacoustic wave equation
	Afternoon session: <i>Passive Seismic</i>	
	Junzhe Sun Yunzhi Shi	Imaging conditions and FWI for passive data Path-integral imaging of passive data

Friday, April 15, 2016		
8:00–8:30	Coffee and pastries	
8:30–12:00	Morning session: <i>Madagascar Software Tutorial</i>	
	Sergey Fomel Yunzhi Shi	Review of Madagascar open-source software project Interactive exercises
12:00–1:00	Lunch	
1:00–4:00	Afternoon session: <i>Inverse Problems Tutorial</i>	
	Kui Ren Tan Bui-Thanh	Mathematics of inverse problems New developments in uncertainty quantification

The meeting location is BEG Houston Research Center,
11611 West Little York Road, Houston, TX 77041.

The dinner location is Pappadeaux Seafood Kitchen
13080 Hwy 290 at Hollister, Houston, TX 77040.

