

Texas Consortium for Computational Seismology

Fourth Bi-Annual Research Meeting Agenda

Monday, November 12, 2012		
8:00–8:30	Coffee and pastries	
8:30–8:45	Eric Potter	Welcome from BEG
8:45–9:30	Sergey Fomel	Introduction and computational reproducibility
9:30–12:00	Morning session: <i>Diffraction Imaging</i>	
	Alexander Klokov Salah Al-Hadab Parvaneh Karimi Luke Decker Chris Hempel (TACC)	Diffraction imaging in the dip-angle domain Diffraction imaging in Canterbury Volumetric curvature using predictive painting Diffraction imaging of carbonate reservoir models TACC overview and tour
12:00–1:00	Lunch	
1:00–5:00	Afternoon session: <i>Wave Modeling</i>	
	Lexing Ying Jack Poulson Xiaolei Song Jiubing Cheng (Tongji U) Junzhe Sun	Review of fast sweeping preconditioners Fast parallel 3-D Helmholtz solvers Fourier finite differences and lowrank finite differences Anisotropic wave mode separation Lowrank wave propagation of anisotropic wave modes
5:30–8:30	Wine reception and dinner at Maggiano's	

Tuesday, November 13, 2012		
8:00–8:30	Coffee and pastries	
8:30–12:00	Morning session: <i>Inverse Problems and Data Analysis</i>	
	Laurent Demanet (MIT) Jingwei Hu Rachel Ward Haizhao Yang James Martin	Interferometric waveform inversion Fast butterfly algorithm for non-stationary Radon Compressed sensing and sparse signal recovery Synchrosqueezed wave packet transform Computational Bayesian inverse problems
12:00–1:00	Lunch	
1:00–4:00	Afternoon session: <i>High-frequency Waves</i>	
	Bjorn Engquist Vladimir Bashkardin Siwei Li Xu Yang (UCSB) Alexey Stovas (NTNU)	Gaussian beams and complex eikonal equation Phase-space travelttime computations Kirchhoff migration with source derivatives Frozen Gaussian beams Moveout mappings in TTI media

The meeting location is Room ROC 1.603, Texas Advanced Computing Center (TACC)
J.J. Pickle Research Campus, Building 196, 10100 Burnet Road (R2200), Austin, TX 78758

The dinner location is Maggiano's
10910 Domain Drive, Suite 100, Austin, TX 78758