

数学与系统科学研究院

计算数学所学术报告

报告人: **Post-Doctor Guanghui Huang**

(*Department of Computational and Applied Mathematics, Rice University*)

报告题目:

**Matched Source Waveform
Inversion for Seismic Inverse
Problem**

邀请人: 陈志明 研究员

报告时间: **2017 年 1 月 19 日 (周四)**

上午 10:15-11:15

报告地点: 数学院南楼二层

202 教室

Abstract:

In this talk, I will introduce one kind of source-based extended waveform inversion called Matched Source Waveform Inversion (MSWI), which allows additional, non-physical sources acting at shotting time. The extra sources permit the data to be fit well, even when velocity is kinematically inconsistent with data. A distance-weighted penalty on source energy is minimized when the data is fit.

Good data fit throughout the inversion process produces a considerably more convex objective function than does the standard data-domain FWI formulation. A good theoretical foundation for this approach exists for pure transmission problems, while numerical examples suggest that in fact it may be a feasible approach to reflection and transmission inversion when the low frequency components of data is missing.

欢迎大家参加！