数学与系统科学研究院

计算数学所学术报告

报告人：**Prof. Sun Jiguang**

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报告题目：

Limited Aperture Inverse Scattering Problems using Bayesian Approach and Extended Sampling Method

邀请人： 张硕 副研究员

报告时间：**2019 年 5 月 30 日（周四）**

上午 10:00-11:00

报告地点： 科技综合楼三层

301 报告厅

Abstract:

Inverse scattering problems have many important applications. In this talk, given limited aperture data, we propose a Bayesian method for the inverse acoustic scattering to reconstruct the shape of an obstacle. The inverse problem is formulated as a statistical model using the Baye's formula. The well-posedness is proved in the sense of the Hellinger metric. The extended sampling method is modified to provide the initial guess of the target location, which is critical to the convergence of the MCMC algorithm. Examples are presented to show the performance of the proposed method.

欢迎大家参加！