

数学与系统科学研究院

计算数学所学术报告

报告人: 杨家青 副教授

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报告题目:

**Imaging of local rough surfaces by
near-field measurements**

邀请人: 黄记祖 博士

报告时间: 2018 年 12 月 29 日(周六)

下午 15:00-16:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

In this talk, I will report our recent work on the inverse scattering by local rough surfaces with near-field measurements. By constructing a special Green's function, we can reduce the model problem to an equivalent boundary value problem with compactly supported boundary data, where its wellposedness can be proved by the variational approach with using the classic Fredholm theory. Then, based on a modified near-field equation, we propose a novel sampling-type method for reconstructing the local perturbation about the rough surface, which leads to a fast imaging algorithm. Finally, numerical experiments are presented to illustrate the effectiveness of our method.

欢迎大家参加！