

数学与系统科学研究院

计算数学所学术报告

报告人: **Assistant Prof. Xiaoliang Wan**

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报告题目:

**Some numerical issues of minimum
action method**

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报告时间: **2015 年 7 月 24 日 (周五)**

上午 10:00~11:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

Minimum action method plays an important role in studying rare events in non-gradient systems. In this talk, we focus on two issues of minimum action method. The first issue is to deal with the difficulties induced by the separation of slow and fast dynamics. We will introduce a new version of minimum action method, which is based on optimal linear time scaling and hp-adaptivity. The global reparametrization has been removed, which makes the algorithm more suitable for parallel computing. The second issue is to deal with the inverse of the covariance operator when a spatially extended system is considered. This issue will be illustrated by an elliptic problem perturbed by small spatial Gaussian noise, where we need to approximate an integro-differential operator.

欢迎大家参加！