

数学与系统科学研究院

计算数学所学术报告

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报告题目:

Modeling Rare Events in complex systems

邀请人: 明平兵 研究员

报告时间: 2013 年 9 月 13 日 (周五)

下午 15:00-16:00

报告地点: 科技综合楼三层 311

计算数学所报告厅

Abstract:

The dynamics of complex systems is often driven by rare but important events. Well known examples include nucleation events during phase transitions, conformational changes of macro-molecules, chemical reactions, etc. The long time scale associated with these rare events is a consequence of the disparity between the effective thermal energy and typical energy barrier of the systems. The dynamics proceeds by long waiting periods around metastable states followed by sudden jumps from one state to another. The disparity of time scales makes the study of such rare event a very challenging task. In this talk, we discuss the string method for the study of rare events and its extension for saddle point search.

欢迎大家参加!