

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Arieh Iserles**

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报告题目:

**Highly oscillatory ODEs with
irregular oscillators**

邀请人: 唐贻发 研究员

报告时间: **2014 年 5 月 5 日 (周一)**

下午 16:15~17:15

报告地点: **科技综合楼三层 311**

计算数学所报告厅

Abstract:

There exist several robust computational approaches to ODEs with regular highly oscillating terms, not least the HMM and asymptotic expansions. However, once we consider irregular oscillators and allow for the presence of stationary points, very little exists in terms of either theory or numerical practice. In this talk we develop a general asymptotic expansion in this setting. Each n -th term in this expansion can be computed as a highly oscillatory integral over n -dimensional simplexes.

欢迎大家参加!