

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Yitzhak Fouxon**

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报告题目:

**Finite-time Lyapunov exponents and
large deviations**

邀请人: 于海军 副研究员

报告时间: **2019年5月8日 (周三)**

上午 10:30-12:30

报告地点: 科技综合楼三层

311 报告厅

Abstract:

Recently the theory of finite-time Lyapunov exponents of random flows was developed consistently by reduction of the multiplicative ergodic theorem to the usual ergodic theorem. The exponents are represented as integrals of stochastic processes with finite correlation time which are equivalent to sums of large number of independent random variables. We describe the distribution of the finite time Lyapunov exponents using the theory of large deviations and demonstrate that infinite Lyapunov exponents arise as almost sure limits. Several new relations are provided and their connection with the correlation dimension of strange attractors is elucidated.

欢迎大家参加！