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：

Kissing polynomials

邀请人：　唐贻发 研究员

报告时间：**2015 年 8 月 11 日（周二）**

上午 9:00~10:00

报告地点：　数学院南楼七层

702 会议室

Abstract：

While the theory of orthogonal polynomials is rich and fairly comprehensive, very little is known about polynomials orthogonal with respect to a complex-valued sesquilinear form. Such polynomials turn out to be of huge importance in the computation of highly oscillatory integrals, and this has motivated the work leading to the present talk. We will describe the current state of knowledge of such polynomials, inclusive of an explanation of a very strange "kissing pattern" of their zeros and their asymptotic behaviour. We will commence from the basic principles, using tools of asymptotic, enumerative combinatorics and a soupçon of random matrix theory and theory of integrable systems. (This is joint work with Alfredo Deaño and Daan Huybrechs.)

欢迎大家参加！