数学与系统科学研究院

计算数学所学术报告

报告人：**Prof. R. Michael Range**

（ ***State University of New York at Albany*** ）

报告题目：

Calculus: Have We Been Teaching it Wrong?

邀请人：　　林群院士

报告时间：**2011** 年 **10** 月 **11** 日（周二）

下午 **16：00-17：00**

报告地点：　科技综合楼三层 **301**

计算数学所小报告厅

Abstract:

A method introduced in the 17th century by R. Descartes and F. van Schooten for finding tangents to classical curves is combined with the point-slope form of a line in order to develop the differential calculus of all functions considered in the 17th and 18th centuries based on simple purely algebraic techniques. This elementary approach avoids infinitesimals, differentials, and similar vague concepts, and most importantly it does not require any limits in the study of algebraic functions. It naturally leads to continuity and to the modern definition of differentiability—in an elegant formulation introduced by C. Carathéodory—which needs to be considered when studying the elementary transcendental functions. This approach suggests new ways to teach calculus in the 21st century.

欢迎大家参加！