数学与系统科学研究院

计算数学所学术报告

报告人：**Prof. Jesus Maria Sanz-Serna**

（ *Royal Academy of Sciences and University of Valladolid, Spain* ）

报告题目:

B-series and geometric integration

邀请人： 唐贻发 研究员

报告时间：**2014 年 5 月 6 日（周二）**

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：

B-series, introduced by Hairer and Wanner are series in powers of the stepsize that provide the Taylor expansión of the approximations obtained by Runge-Kutta and other numerical methods in the solution of ordinary differential equations. They have played an important role in symplectic and geometric integration. I shall provide a short review of the most important aspects of these developments.

Biography：

Prof. Sanz-Serna is one of the leading researchers in Numerical Analysis around the world. He was borne in Valladolid in 1953, he studied Mathematics at the university of his mother town, where he is Full Professor of Applied Mathematics since 1982. Although he has made important contributions in different fields of Applied Mathematics and Numerical Analysis, his most successful research has been that on the numerical solution of Hamiltonian problems, which has given rise to a very active area, nowadays referred to as Geometric Integration. In the last years he is working on Highly Oscillatory Problems, Stochastic Analysis and Monte Carlo methods. He was the first Spanish mathematician ever invited to speak at an International Congress of Mathematicians (in Zurich in 1994), and he is one of the most widely cited Spanish scientists in spite of the 8 years (1998-2006) he spent as Rector of his mother university. He is member of the Royal Academy of Sciences of Spain since 2007, Fellow of SIAM since 2009 and, more recently, Fellow of the Institute of Mathematics and its Applications and of the American Mathematical Society. Since 2012 he is also a member of the European Academy of Sciences. He has received several important awards from both, national and international Scientific Communities. He received the Germund Dahlquist Prize sponsored by SIAM in its first edition in 1995, the Iberdrola research prize (awarded once a year by a committee of Nobel prize winners to the best researcher in Spain across all fields), the prize of the Royal Spanish Academy of Sciences and, in 2013 he received the Research Prize of the Board of the University of Valladolid.

欢迎大家参加！