

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. John Butcher**

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报告题目:

**The order of G-symplectic integrators**

邀请人: 唐贻发 研究员

报告时间: **2014年5月6日 (周二)**

**上午 9:30~10:30**

报告地点: **科技综合楼三层 311**

**计算数学所报告厅**

## **Abstract:**

**G-symplectic methods are multivalued methods which possess a property similar to, but more general than, the symplectic property. Over short time intervals they are able to mimic the conservative behaviour of canonical Runge-Kutta methods. However, over longer intervals, parasitism can destroy their symplectic-like properties. It will be demonstrated that parasitism can be brought under control by using compositions and by designing methods with zero growth factors. The analysis of the numerical order of G-symplectic methods is found to be very intricate. Some of the details of this analysis will be presented.**

**欢迎大家参加！**