

数学与系统科学研究院

计算数学所学术报告

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报告题目:

**Numerical Solution of Fractional
Differential Equations**

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报告时间: **2013 年 6 月 25 日 (周二)**

下午 15:00-16:00

报告地点: **科技综合楼三层 301**

计算数学所小报告厅

Abstract:

The subject of fractional calculus has gained considerable popularity and importance during the past three decades, mainly due to its attractive applications in numerous fields of science and engineering. Fractional differential equations have been used for the mathematical modeling in potential fields, conservation of mass, diffusion problems, dispersion problems, in heat equations, and so on. The fractional calculus provides an excellent instrument for the description of memory and hereditary properties of various materials and processes. Numerical methods must conserve these properties, but classical numerical methods cannot afford it. The Grünwald-Letnikov method is discussed in detail, which can be regarded as a generalization of Euler's method.

欢迎大家参加!