

数学与系统科学研究院

计算数学所学术报告

报告人: 黄健飞 博士

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报告题目:

**A Unified Numerical Method for
Time-fractional Sub-diffusion and
Super-diffusion Equations**

邀请人: 唐贻发 研究员

报告时间: 2014 年 10 月 13 日 (周一)

下午 16:00-17:00

报告地点: 科技综合楼三层 311

计算数学所报告厅

Abstract:

We will first discuss a stable finite difference scheme for time-fractional super-diffusion equation, which has one-order accuracy in time and second-order accuracy in space based on the weak smoothness in temporal direction and the equivalent integral equation form, second construct a unified second order difference method for time-fractional sub-diffusion and super-diffusion equations which is absolutely stable for sub-diffusion equation and conditional stable for super-diffusion equation, third design a stable second-order difference/spectral method for both sub-diffusion equation and super-diffusion equation.

欢迎大家参加!