数学与系统科学研究院

计算数学所学术报告

报告人：Prof. Jinyun Yuan

（ Federal University of Parana, Brazil ）

报告题目：

Numerical Methods for 2D and 3D fractional Convection-Diffusion Differential Equations

邀请人： 袁亚湘 院士

报告时间：2016 年 1 月 12 日（周二）

下午 15:30~16:30

报告地点： 科技综合楼三层

311 报告厅

Abstract:

Fractional derivate can be backed to 1695 suggested by Lhopital and Leibniz. Then Eular, Fourier etc made their contributions to the subject. Recently the fractional calculus got more atteentions because of the applications. Many people are studying numerical approximations to fractional integral equations and fractional differential equations. For the 2D space fractional convection-diffusion differential equation, we use descontinius Galerkin method to deal wiht space fractional derivative and characteristic method to deal with time derivative. The stability and error analysis are investiated. Some numeircal simulations are given. For the 3d time fractional convection-diffusion equation, the finite difference method is used to get numeircal simulation.

欢迎大家参加！