

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:

**Modeling and discontinuous
Galerkin finite element method for a
coupled free flow and fractured
porous media flow**

邀请人: 张晨松 副研究员

报告时间: 2019 年 11 月 19 日 (周二)

上午 9:00-10:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

In this talk, we will study fluid flow in coupled free flow and fractured porous media regions. Mathematical modeling and numerical simulations of this coupled problem are not easy because the physical problem involves vastly disparate of fluid flow channel, the coexist of free flow, porous media flow and fluid transmission in three regions, and the strong heterogeneity, anisotropy and discontinuity of fractured porous media arising from fractures. Combining mathematical modeling, theoretical analysis and numerical simulations, we will study incompressible single phase flow in coupled free flow and fractured porous media regions thoroughly. Numerical experiments using the DG method show agreement of the numerical results with theoretical analysis.

欢迎大家参加！