

数学与系统科学研究院

计算数学所学术报告

报告人: Craig C. Douglas and Xiukun Hu

*(School of Energy Resources, Mathematics & Statistics, and
Computer Science, University of Wyoming, Laramie, WY, USA)*

报告题目:

**Performance and Scalability Analysis
of a Coupled Dual Porosity Stokes
Model Implemented with FEniCS**

邀请人: 张林波 研究员

报告时间: 2019 年 7 月 10 日 (周三)

上午 10:00-11:00

报告地点: 数学院南楼二层

202 教室

Abstract:

A coupled dual porosity Stokes model has been proposed in recent years to help modeling fractured porous media with large conduits. A numerical solution of such a model that works in both 2D and 3D in parallel has been implemented using FEniCS. In this talk, we describe tests for the convergence of this implementation with sample problems in both 2D and 3D, describe the performance and scalability of this implementation thoroughly, and compare the performance between different solvers and preconditioners.

欢迎大家参加！