

数学与系统科学研究院
计算数学所网络学术报告

报告人: **Xiaoli Li**
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报告题目:

**Superconvergence of MAC scheme
for simulating wormhole
propagation with the DBF
framework**

邀请人: 张晨松 副研究员

报告时间: 2020 年 9 月 18 日 (周五)
下午 14:00-15:00

报告工具: 腾讯会议 (ID: 165 249 179)

会议链接: 请实名进入会议室 (单位+姓名)

<https://meeting.tencent.com/s/J0hJJOWGPh65>

Abstract:

In this talk, we shall first present the finite difference scheme on non-uniform staggered grids for wormhole propagation with the Darcy–Brinkman–Forchheimer framework in porous media. Error estimates for the pressure, velocity, porosity, concentration and auxiliary flux with second-order superconvergence in different discrete norms are established rigorously and carefully on non-uniform grids. We also obtain second-order superconvergence for some terms of the H^1 norm of the velocity on non-uniform grids. Finally, some numerical experiments are presented to verify the theoretical analysis and effectiveness of the proposed scheme.

欢迎大家参加！