

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:

**Multiscale Hybrid Approximations
of Conservation Laws**

邀请人: 张晨松 副研究员

报告时间: 2017 年 8 月 18 日 (周五)

上午 10:00-11:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

The Multiscale Hybrid Method (MHM) is a numerical technique geared towards the numerical approximation of problems involving multiple scales. It was originally proposed and developed by F. Valentin, D. Paredes and C. Harder.

Multiscale problems are characterized by the fact that an important part of the behavior of the physical phenomenon is determined a characteristic that is too fine to be solved.

The MHM is an approach naturally contains the concepts of Upscaling (transferring information from the fine scale to the coarse scale) and Downscaling (transferring information from the coarse scale to the fine scale).

In this work we present a variant of the MHM method, called MHM-H(div) which is locally conservative, converges faster than MHM and has successfully applied to the numerical simulation of multiphase reservoir flow.

欢迎大家参加！