数学与系统科学研究院

计算数学所网络学术报告

报告人：　**Prof. Weiqing Ren**

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报告题目：

Modeling and Simulation of Moving Contact Lines in multiphase fluids

邀请人：　郑伟英 研究员

报告时间：**2021** 年 **6** 月 **3** 日（周四）

上午 **10:00-11:00**

报告工具：腾讯会议 **ID:**（**665 6236 3867**）

入会密码：**10190**

会议链接：

https://meeting.tencent.com/s/t9vmgLmRBDDj

Abstract:

Moving contact lines arise when one fluid is displaced by another on a solid substrate. It is well-known that the no-slip boundary condition on the solid wall leads to an infinite rate of energy dissipation in hydrodynamic models. To overcome this difficulty, we derive a slip model based on molecular dynamics simulations and thermodynamic principles. We illustrate how this model can be used to analyse the behaviour of the apparent contact angle, hysteresis and other important physical problems for the moving contact line. We also discuss the distinguished limits of the slip model as the slip length tends to zero and introduce energy-stable numerical methods.

欢迎大家参加！