

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:

Some energy stable schemes for phase field model with moving contact lines.

邀请人: 于海军 副研究员

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上午 10:00-11:00

报告地点: 数学院南楼九层 902
会议室

Abstract:

we present some efficient energy stable schemes to solve a phase field model incorporating moving contact line. The model is a coupled system that consists of incompressible Navier–Stokes equations with a generalized Navier boundary condition and Cahn–Hilliard equation in conserved form. By some subtle explicit-implicit treatments, we obtain a linear coupled energy stable scheme for systems with dynamic contact line conditions and a linear decoupled energy stable scheme for systems with static contact line conditions. The energy stability is obtained by rigorous proof and numerical results also show that the proposed schemes are very efficient and accurate.

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