

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 new advances on modeling and algorithms development of multiphase complex fluid system using the phase field method

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报告地点: 科技综合楼三层 311

计算数学所报告厅

Abstract:

We present some efficient modeling approach for the two phase complex fluid system, that is the mixture of nematic liquid crystal drop and viscous ambient fluids. Similar approach has been applied to the two phase fluid system with variable density and viscosity, The models, derived by employing an energetic variational phase field approach, are thermodynamically consistent that admits an energy dissipation law. Some decoupled, linear, energy stable schemes are developed to solve the models efficiently. Qualitative agreements with experimental results are observed.

欢迎大家参加!