数学与系统科学研究院

计算数学所学术报告

报告人： **Dr. Jia Zhao**

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报告题目：

Modeling and Numerical Approximations of Dissipative Systems with Applications

邀请人： 许现民 副研究员

报告时间：**2018 年 7 月 16 日（周一）**

上午 10:00-11:00

报告地点： 科技综合楼三层

301 报告厅

Abstract：

In this talk, I will first discuss the generalized Onsager principle for deriving hydrodynamic theories (equations) for multiphase complex fluids. The generalized Onsager principle combined with variational principle would give a dissipative system that the total energy is decreasing in time. Then I will introduce the newly proposed energy quadratization approach to develop efficient, accurate and energy stable numerical approximations for dissipative systems. In the end, a few applications would be discussed to demonstrate the effectiveness of the modeling and numerical tools.

欢迎大家参加！