

数学与系统科学研究院
计算数学所定期学术报告

报告人: 雍稳安 教授

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报告题目:

**CDF---A theory of mathematical
modeling for irreversible processes**

邀请人: 许现民 副研究员

报告时间: 2017 年 10 月 25 日(周四)

下午 16:00-17:00

报告地点: 思源楼一层

报告厅

Abstract:

In this talk I will present our recently-developed Conservation-Dissipation Formalism (ChDF) of non-equilibrium thermodynamics. The formalism is based on a stability criterion, which was proposed after observing many existing PDE models. With this formalism, we formulate novel thermodynamics theories for heat conduction in rigid bodies and non-isothermal compressible Maxwell fluid flows.

I will also show that the constructed PDEs meet four fundamental requirements: the robustness, irreversibility, long-time tendency to equilibrium, and compatibility with the possibly existing classical models.

欢迎大家参加！