

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Yuwei Fan**

(Stanford University, USA)

报告题目:

**Exploration on the numerical method
for Boltzmann equation**

邀请人: 周爱辉研究员

报告时间: 2017年12月20日(周三)

下午 16:00--17:00

报告地点: 数学院南楼七层

714 会议室

报告摘要:

**There are several challenge issues in
numerical solution of Boltzmann equation,**

including high dimension of the equation and complicated collision term. In this talk, I will try to study these issues one by one. The globally hyperbolic moment method is proposed to deal with the high dimension and reduce the 7-dimension equation into a 4-dimension equations consists of tens of equations. For the complicated collision, an entropic spectral method is proposed to solve the collision and preserve the H-theorem of the collision meanwhile. However, how to combine the two methods to solve the Boltzmann equation is another important issue. I will try to explore this problem and present some viewpoint

欢迎大家参加！