

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:

**Numerical Simulations of Stellar and
Planetary Core Convection**

邀请人: 黄记祖 博士

报告时间: 2015 年 6 月 23 日 (周四)

下午 16:00~17:00

报告地点: 数学院南楼七层

702 会议室

Abstract:

We have developed a multi-layer semi-implicit spherical spectral model for studying stellar and planetary core convection. This model solves the compressible hydrodynamic equations with large time steps and allows for inclusion of the center of a star in the computational domain. The code is parallelized with good scaling property. Numerical simulations on stellar and planetary convection are performed with the spectral model. Many of the flow characteristics found by the earlier studies are reconfirmed. The flow structure of core convection is discussed.

欢迎大家参加！