

数学与系统科学研究院
计算数学所系列学术报告

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报告题目:

**Alfven Waves in Magnetic
Confinement Fusion --- Equation to
Example**

邀请人: 郑伟英 研究员

报告时间: 2015 年 6 月 28 日 (周日)

上午 9:00~11:00

报告地点: 数学院南楼七层

702 会议室

Abstract:

Alfven wave and energetic particle physics play crucial roles in burning plasmas in magnetic confinement fusion studies. Experimental observations of Alfven activities have been indicating the potential excitation mechanism upon different particle species with varied range of energy. Theoretical investigation and numerical simulation have been demonstrating kinetic excitation process upon wave-particle resonances over the toroidal precessional frequency and the bounce frequency / the transit frequency of ions/electrons of thermal/energetic plasma components. This presentation is to serve as a basic introduction to understand physical correlations behind the observed Alfvenic phenomena upon selected examples, including magnetohydrodynamic features as well as kinetic characteristics.

欢迎大家参加！