中国科学院数学与系统科学研究院应用数学研究所

偏微分方程及其应用中心

学术报告

报告题目： **Uniform anisotropic regularity in low Mach number of ideal MHD with general initial data**

报 告 人： 章俊彦，新加坡国立大学

时　　间： **2024 年 12 月 2 日（星期一）10:30-11:30**

地　　点： **数学院南楼 N613**

摘　　要： We prove the low Mach number limit of non-isentropic ideal MHD equations in the half-space with perfectly conducting wall condition in the case of general initial data. The special structure in vorticity analysis motivates us to define a space-time anisotropic Sobolev norms with weights of Mach number determined by the number of material derivatives. Then we use the technique of Alinhac good unknowns to avoid the uncontrollable terms arising in the tangential estimates. This is based on a recent joint work with Prof. Ju Qiangchang and Dr. Wang Jiawei.