#### 数学与系统科学研究院

## 计算数学所定期学术报告

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## 报告题目:

Zero-viscosity limit of the Navier-Stokes equations

邀请人: 徐丽 博士

<u>报告时间</u>: 2016 年 12 月 22 日(周四) 下午 16:00-17:00

<u>报告地点</u>:数学院思源楼 一层报告厅

# Abstract:

In this talk, I will talk about the **Navier-Stokes** equations and Euler equations. I will present some the classical results. Then I will talk about the relation between the two equations which is called inviscid limit. When there is no boundary, the limit can be easily got. But if there is boundary, the boundary layer appears. In this case, there appears a lot of interesting physical phenomenon. They are a lot of open problems. One of them is that how to justify the limit. Here, based on the vorticity formulation and the use of conormal derivative, we develop the energy method to justify the zero-viscosity limit of the Navier-Stokes equations in a half space with non-slip boundary condition under the analytic data.

欢迎大家参加!