# 学术报告

## Scaling invariant Serrin criterion via one velocity component for the Navier-Stokes equations

Prof. Zhifei Zhang（章志飞 教授）

Peking University（北京大学）

**Time：** 15:00-16:00, July 21(Tuesday), 2020

**Venue：** 腾讯会议 ID: 516 794 048

**Abstract：** Whether the 3-D Navier-Stokes equations can develop the singularity in a finite time is a challenging problem. The well-known Ladyzhenskaya-Prodi-Serrin criterion says that if Leray weak solution belongs to the Serrin class, then it is smooth. In this talk, I will introduce a scaling invariant Serrin type criterion via one velocity component. In particular, this result implies that if the solution blows up at some time, then all three components of the velocity must blow up at the same time. This a joint work with Wendong Wang and Di Wu.

欢迎大家参加！