



# 北京理工大学

## 数学与统计学院学术报告

On asymptotic stability of Type I blowup for NLS

**报告人:** 李泽兴, 剑桥大学

**时间:** 2024年02月28日, 16: 30

**地点:** 腾讯会议: 502-957-226会议密码: 0228

**摘要:** For slightly mass supercritical nonlinear Schrodinger equations (NLS), Type I (self-similar) blowup has been proven to exist and generate stable blowup dynamics. However, the asymptotic stability was missing. With suitable self-similar profiles constructed recently, we take one further step to show their finite codimensional asymptotic stability. One core ingredient is a Strichartz estimate for the linearized matrix operator, where an "enhanced dispersion" phenomenon for the propagator is exploited. If time permitted, we will briefly discuss the full asymptotic stability which is a work in preparation.

**个人简介:** 李泽兴, 剑桥大学三年级博士生, 导师为 Pierre Raphaël。主要研究色散方程中解的长时间行为和爆破现象。