

## 北京理工大学

## 数学与统计学院学术报告

## Asymptotic Stability of Rarefaction Wave to the Quantum-Navier-Stokes equations

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时 间: 2025年10月23日 16:00--17:00

地 点: 良乡校区 文萃楼 E609

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**摘** 要: It is well known that the rarefaction wave is one of the basic wave patterns of the hyperbolic conservation laws. In this talk we prove time-asymptotic stability towards the rarefaction wave to the Quantum-Navier-Stokes equations, provided that the strength of the wave is weak and the initial perturbation is small. The proof is mainly based on \(\( \L^2 \\)\)-energy method and some time-decay estimates in \(\( \L^p \\)\)-norm for the smoothed rarefaction wave.