



# 北京理工大学

## 数学与统计学院学术报告

### Singularities propagation in deterministic and random setting

**报告人:** 程伟 南京大学

**时间:** 2024年1月9日(周2)下午16:00-17:00

**地点:** 文萃楼I座101

**摘要:** Singularities propagation comes from the Riemann problem in hyperbolic conservation law. There are various notions of singular characteristics in the theory of propagation singularities of viscosity solutions. In this talk, we will discuss the variational construction of generalized characteristics and strict singular characteristics. We proved the solution of generalized characteristics can be constructed in an intrinsic way using the idea of minimizing movements and certain process of homogenization. Moreover, the relation between the strict singular characteristics and the EDI-EVI frame of gradient flow was also discussed. In general, these results bridge various different topics. This talk is based on our latest work with Piermarco Cannarsa, Jiahui Hong, Kaizhi Wang and Tianqi Shi.

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