



复旦大学数学科学学院 数学综合报告会

报告题目: Some rigidity results on complete Finsler (or spray) spaces

报告人: 莫小欢 教授 (北京大学)

时间: 2026-05-14 星期四 15:00-16:00

地点: 光华楼东主楼2001

报告摘要:

In this lecture, we first introduce a new notion of generalized super-weak Funk functions on a Finsler (or spray) space. Then we show that there is no non-trivial generalized super-weak Funk function on a complete spray space generalizing a result previously known only in the case of weak Funk functions on compact spray spaces. As its application, we prove that every complete Finsler space with $\{S\} \geq \lambda \tau^2$ for some positive constant λ must be Riemannian where $\{S\}$ and τ are the S-curvature and the distortion respectively. We also give *new* or *simple* proofs of the Shen-Sun's and Chen-Shen's global rigidity theorems.

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