



武汉大学学术活动信息

WUHAN UNIVERSITY ACADEMIC NEWS

报告题目: Characterization of Ricci curvature and Ricci flow by Brownian motion

报告人: Prof.Anton Thalmaier(University of Luxembourg)

报告时间: 2018年11月07日 16:00--17:00

报告地点: 理学院东北楼四楼报告厅 (404)

报告摘要: We present recent work characterizing Ricci curvature and Ricci flow on manifolds in terms of functional inequalities for heat semigroups. The observation of Aaron Naber that bounded Ricci curvature on a Riemannian manifold controls the analysis on path space, in a manner analogous to how lower Ricci curvature bounds control the analysis on the manifold, gave new impetus to the field. The functional inequalities allow in particular to characterize Einstein manifolds and Ricci solitons. The talk includes extensions of these methods to geometric flows on manifolds, as well as to the path space of Riemannian manifolds evolving under a geometric flow.

