



复旦大学数学科学学院 数学综合报告会

报告题目: **Heat equation on time-dependent metric measure spaces and super-Ricci flows**

报告人: Prof. Dr. Karl-Theodor Sturm

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报告时间: 2017-05-25 星期四 10:30-11:30

报告地点: 光华东主楼 1501

摘要: We study the heat equation on time-dependent metric measure spaces (being a dynamic forward gradient flow for the energy) and its dual (being a dynamic backward gradient flow for the Boltzmann entropy). Monotonicity estimates for transportation distances and for squared gradients will be shown to be equivalent to the so-called dynamical convexity of the Boltzmann entropy on the Wasserstein space which in turn is the defining property of super-Ricci flows of metric measure spaces.

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