


复旦大学数学科学学院
数学综合报告会

报告题目： A regularization property of heat semigroups and applications

报告人：陈丽 (Louisiana State University)

时间：2020-12-02 星期四 9:00-10:00

地点：腾讯会议 ID：681 500 299， 密码：24680

报告摘要：

I will talk about a ``universal'' regularization property of heat semigroups motivated by an original work of Nick Dungey on graphs. Namely in the settings of Riemannian manifolds and discrete graphs, this property is the L^p ($1 < p \le2$) boundedness for the gradient of the heat semigroup. On Dirichlet spaces, the counterpart is the continuity of the heat semigroup on heat semigroup-based Besov spaces. I will also discuss their applications on the study of Riesz transforms and critical exponents of Besov spaces.

非线性数学模型与方法教育部重点实验室
中法应用数学国际联合实验室
上海市现代应用数学重点实验室
复旦大学数学研究所