



## 复旦大学数学科学学院 数学综合报告会

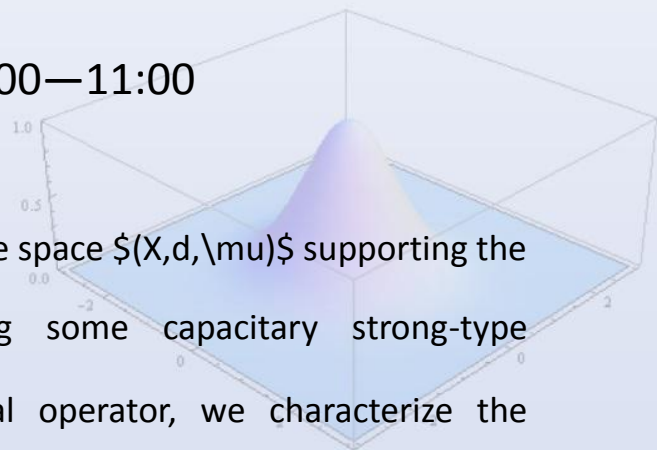
报告题目: **Restrictions for solutions of the heat equations with Newton-Sobolev data on metric measure spaces**

报告人: 袁文 教授  
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报告时间: 2017-04-27 星期四 10:00—11:00

报告地点: 光华东主楼 1501

摘要: On a complete doubling metric measure space  $(X, d, \mu)$  supporting the weak Poincaré inequality, by establishing some capacitary strong-type inequalities for the Hardy-Littlewood maximal operator, we characterize the measure  $\nu$  on the space  $X \times (0, \infty)$  so that the mapping  $f \mapsto \int_X p_t(\cdot, y) f(y) d\mu(y)$ , is bounded from the Newton-Sobolev space  $N^{1,p}(X)$  with  $p \in [1, \infty)$  into the Lebesgue space  $L^q(X \times (0, \infty), \nu)$  with  $q \in (0, \infty)$ , where the kernels  $p_t$  are some generalized heat kernels. This result generalizes the Carleson embeddings obtained in [J. Differential Equations 224 (2006), 277-295], ...



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