

1148-46-261

Li Chen* (li.4.chen@uconn.edu), 341 Mansfield Road U1009, Storrs, CT 06269. *BV on Besov classes associated with Dirichlet spaces.*

In this talk, I will introduce a general theory of heat semigroup-based Besov spaces on general Dirichlet spaces. I will then discuss their applications to the study of bounded variation functions on metric measure spaces with Gaussian heat kernel estimates and with sub-Gaussian heat kernel estimates (like fractals).

This is based on joint work with P. Alonso-Ruiz, F. Baudoin, L. Rogers, N. Shanmugalingam and A. Teplyaev. (Received February 04, 2019)