

ACMS Applied Math Seminar

Jing Wang

Thursday, April 12, 2018

154 Hurley Hall

3:30 – 4:30 PM



Brownian Motion and Heat Content on the Heisenberg Group

In this talk, we study small time asymptotic of the heat content for a smoothly bounded domain in the Heisenberg group, which captures geometric information of the boundary including perimeter and the total horizontal mean curvature of the boundary of the domain.

We use probabilistic method by studying the escaping probability of the horizontal Brownian motion process that is canonically associated to the sub-Riemannian (degenerate) structure of the Heisenberg group.

This is a joint work with J. Tyson.

The Department of Applied and Computational
Mathematics and Statistics

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