

Analysis and Applied Mathematics Seminar

Analysis of Dirichlet forms vanishing at the boundary

Soobin Cho (UIUC)

Abstract: In this talk, I will explore efficient heat kernel estimates for jump-type Dirichlet forms and their associated Markov jump processes, specifically focusing on jump kernels that vanish at the boundary. In the first part, I will provide an overview of heat kernel estimates for jump processes in spaces with boundaries, encompassing actively reflected processes, killed processes, and censored processes. In the second part, I will present some new features of jump processes with boundary-vanishing jump kernels. The talk is based on joint work with Panki Kim (Seoul National University), Renming Song (UIUC) and Zoran Vondracek (University of Zagreb).

Monday, November 6 at 4:00 PM in 636 SEO