

# Heat kernel estimates for symmetric jump processes with general mixed polynomial growths

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## Abstract

Abstract: In this talk, we discuss transition densities of pure jump symmetric Markov processes in  $\mathbb{R}^d$ , whose jumping kernels are comparable to radially symmetric functions with general mixed polynomial growths. Under some mild assumptions on their scale functions, we establish sharp two-sided estimates of transition densities (heat kernel estimates) for such processes. This is a joint work with Joohak Bae, Jaehoon Kang and Jaehun Lee.