

TWO-SIDED ESTIMATE ON THE GREEN FUNCTIONS OF SUBORDINATE BROWNIAN MOTIONS IN BOUNDED OPEN SETS

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Abstract: Subordinate Brownian motions are obtained from Brownian motion by replacing the time parameter of Brownian motion by an independent subordinator. Subordinate Brownian motions form a large class of Lévy processes, and most of the well-known Lévy processes, such as symmetric stable processes and relativistic stable processes, are subordinate Brownian motions.

In this talk, I will present some recent results in the potential theory of subordinate Brownian motions. In particular, I will discuss sharp two-sided estimates on the Green functions of subordinate Brownian motions in bounded $C^{1,1}$ open sets.

This talk is based on joint works with Panki Kim and Zoran Vondracek.

References

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