ON THE POTENTIAL THEORY OF ONE-DIMENSIONAL SUBORDINATE BROWNIAN MOTIONS

TOMASZ GRZYWNY

The purpose of this talk is to present some recent results about subordinate Brownian motions on $\mathbb{R}$. We give new forms of estimates for the Lévy and potential density of the subordinator near zero. These results provide us to find estimates for the Lévy and potential density of the subordinate Brownian motion X near origin. Next we show the asymptotic behaviour of the derivative of the renewal function of the ascending ladder-height process for Using these results we find estimates for the Poisson kernel of a half-line.

References

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