

Large Deviations for Local Times of Stable Processes and Stable Random Walks in 1 Dimension

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Abstract

In Chen and Li (2004), large deviations were obtained for the spatial L^p norms of products of independent Brownian local times and local times of random walks with finite second moment. The methods of that paper depended heavily on the continuity of the Brownian path and the fact that the generator of Brownian motion, the Laplacian, is a local operator. In this paper we generalize these results to local times of symmetric stable processes and stable random walks.

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