

MASSIVE SETS FOR A CLASS OF RANDOM WALKS ON THE LATTICE

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We study random walks in the integer lattice \mathbb{Z}^d , $d \geq 3$, which are obtained by subordinating the simple random walk. The Laplace exponent of the subordinator is assumed to be a complete Bernstein function which varies regularly at zero. We estimate asymptotic behaviour of the Green function at infinity. Next we use the Wiener's criterion to investigate some massive sets (for example: hyperplanes, thorns, etc.) for various subordinators.