

# RANDOM WALK IN A SPARSE RANDOM ENVIRONMENT

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We'll investigate a nearest neighbor random walk on the set of integers with random transition probabilities. The random walk moves symmetrically with exception of some random, marked sites, where a random drift is imposed. If the distance between the marked sites  $\xi$  is of finite second moment, the asymptotic behavior of the random walker resembles that in the classical case [3]. If  $\xi$  is of finite mean but infinite variance, one obtains stable limit laws [2]. The last remaining case, when distance between the marked sites is of infinite mean, reveals new behavior. The random walk scales like a simple symmetric random walk, but the corresponding limit distribution is non-stable [1].

## REFERENCES

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