
Zbl 537.60062

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On the length of the longest excursion. (In English)

Z. Wahrscheinlichkeitstheor. Verw. Geb. 68, 365-382 (1985). [0044-3719]

A lower limit of the length of the longest excursion of a symmetric random walk is given. Certain related problems are also discussed. It is shown e.g. that for any $\epsilon > 0$ and all sufficiently large n there are $c(\epsilon) \log\log n$ excursions in the interval $(0, n)$ with total length greater than $n(1-\epsilon)$, with probability 1.

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Classification:
60J15 Random walk
60F15 Strong limit theorems

Keywords:
lower limit; length of the longest excursion; symmetric random walk