The Cover Time of One-dimensional Brownian Motion

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Abstract

Consider a one-dimensional Brownian motion starting at the origin moving on a restricted interval with positive drift. For a given positive number ℓ, the cover time of this Brownian motion is the first time when the range of the Brownian motion is ℓ. In this talk, we will give some results of the cover time of Brownian motion.

Keywords: Brownian motion with drift, cover time.