Wen, Jiwei

Some results on lag increments of principal value of Brownian local time. (English)

Zbl 1004.60082


Summary: Let $W$ be a standard Brownian motion, and define $Y(t) = \int_0^t ds/W(s)$ as Cauchy’s principal value related to the local time of $W$. We study some limit results on lag increments of $Y(t)$ and obtain various results all of which are related to earlier work by D. L. Hanson and R. P. Russo [Ann. Probab. 11, 609-623 (1983; Zbl 0519.60030)].

MSC:

60J65 Brownian motion
60F15 Strong limit theorems

Keywords:
lag increment; principal value; Brownian local time

Full Text: DOI

References:

[1] Bertoin, J., Excursions of a BES0 (d) and its drift term (0 < d < 1), Probab. Theory Relat. Fields, 1990,84:231–250. · Zbl 0665.60073 · doi:10.1007/BF01197846

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.