

Beleva, Mariana D.

Controlled Wiener process by external interventions maximizing the average time until reaching a level. (English) [Zbl 0747.60073](#)

Math. Balk., New Ser. 5, No. 1, 66-75 (1991).

The paper deals with control of Wiener process with positive drifts occurring at random instants. External interventions at suitable times are allowed to eliminate these drifts. A model for control of the process is investigated with accordingly defined external interventions so as to maximize the average time until the controlled process reaches a fixed level. Some special cases are considered when the problems of optimal control have explicit solutions.

Reviewer: M.D.Beleva (Sofia)

MSC:

[60J65](#) Brownian motion

Keywords:

first-passage-times; control of Wiener process; optimal control