

ON LÉVY FLIGHTS IN POTENTIAL WELL

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S u m m a r y

The motion of an overdamped Lévy particle (a particle being under the influence of an external random force with the Lévy distribution law) in a potential well (a generalized Kramers' problem) is considered. The mean crossing/escape time of the particle and the crossing/escape time probability density as a function of time are obtained. The method of numerical integration of the overdamped Langevin equation is used for two types of potential profiles and for the whole admitted region of Lévy indices of the external force.