

## **Random Walk Model with Waiting Times Depending on the Preceding Jump Length**

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In the present work, the generalized continuous time random walk model with a coupled transition kernel is considered. The coupling occurs through the dependence of the waiting time probability distribution on the preceding jump length. For the description of this model, a method is suggested that includes the details of the microscopic distribution over the waiting times and arrival distances at a given point. A close analogy to the problem of a random walk with finite velocity is demonstrated for the particular case of coupling, when a waiting time is a simple function of a preceding jump length. With its help an analytical solution for the generalized random walk model is found, including both effects (finite velocity and jump dependent waiting times) simultaneously.