

**Abstract:**

The effect of fixed macroscopic obstacles on the time, called the residence time, needed by particles to cross a strip in diffusive and ballistic regimes is studied in the framework of different stochastic particle models on lattice. We find that in some regimes the residence time is not monotonic with respect to the size and the location of the obstacles. Results obtained in collaboration with A. Ciallella (Rome), A. Muntean (Karlstad), R. van Santen (Eindhoven), and A. Sengar (Eindhoven) will be reported.