# Walks in Rigid Environments: Continuous Limits

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We consider the models where a particle hopes at integer times to one of the neighboring vertices of a lattice. The scatterers are randomly distrubuted along the vertices of the lattice and their type prescribe the particle where to jump. This class of systems describes deterministic walks in random environments (or multidimensional, i.e. with many tapes, Turing machines). A general class of these models has been recently shown to be completely solvable in 1D. We consider continuous limits of these systems and demonstrate that their behavior is quite different from probabilistic models like a classical biased random walk. Deterministic dynamics ensures that in a continuous limit fluctuations disappear and thus only Euler-type limit exist.