

Abstract Submitted  
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**Quasi-one-dimensional scattering in a discrete model** MANUEL VALIENTE, KLAUS MOLMER, Department of Physics & Astronomy, Aarhus University — We present quasi-one-dimensional scattering of one and two particles with short-range interactions on a discrete lattice model in two dimensions. One of the directions is tightly confined by an arbitrary trapping potential. In the case of two-particle scattering, we will show that more than one confinement-induced resonance appear due to the non-separability of the center-of-mass and relative coordinates on the lattice, which is a necessary ingredient in any experimentally relevant situation.

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