

**On Uniqueness of the Euler Limit of One-Component
Lattice Gas Models**

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(joint work with József Fritz)

ABSTRACT: We investigate the interaction of one-dimensional asymmetric exclusion processes of opposite speeds, the exchange mechanism is combined with a spin-flip dynamics, and this asymmetric law is regularized by a nearest neighbor stirring of large intensity. The model admits a single conservation law, with hyperbolic scaling. By means of a two-step version of LSI based estimation techniques we prove that compensated compactness and the Lax entropy inequality imply the existence and uniqueness of the hydrodynamic limit even in a regime of shocks.