

CONFÉRENCE EN PROBABILITÉ

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[MA 12](#), EPFL, Ecublens

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Euler hydrodynamics of one-dimensional attractive particle systems

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Résumé

We consider attractive irreducible conservative particle systems on \mathbf{Z} , without necessarily nearest-neighbor jumps or explicit invariant measures. We prove that for such systems, the hydrodynamic limit under Euler time scaling exists and is given by the entropy solution to some scalar conservation law with Lipschitz-continuous flux. Our approach is a generalization of Bahadoran *et al.* (2002), from which we relax the assumption that the process has explicit invariant measures.

Références

Bahadoran, C., Guiol, H.,
Ravishankhar, K., Saada, E. (2002). A
constructive approach to Euler
hydrodynamics for attractive particle
systems. Application to k -step
exclusion. *Stoch. Process. Appl.* **99** no.
1, 1-30

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