Shock fluctuations in ASEP

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Abstract

We study the asymmetric simple exclusion process (ASEP) on the integers, a solvable model in the Kardar-Parisi-Zhang (KPZ) universality class of random growth models.

We obtain results about the large time behaviour of ASEP at discontinuities of the particle density, called shocks.

^{*}Punctual, i.e. sine tempore!