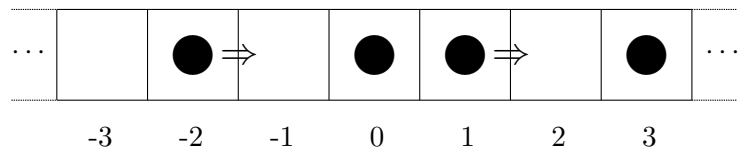# Particle Position Fluctuations in the Asymmetric Exclusion Process

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Time dependent properties of the one-dimensional asymmetric exclusion process(ASEP) are considered. The flucuation of the particle positions in the ASEP are calculated explicitly using a combination of methods from exactly solvable models. We also discuss the connection to the random matrix theory, free fermions and the importance of the initial condition.

The asymmetric simple exclusion process(ASEP)