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TASEP with generalized update and Matrix Product Ansatz

The steady-state distribution of Totally Asymmetric Simple Exclusion Process (TASEP) model has been studied by means of Matrix Product Ansatz (MPA) for variety of updates: random-sequential, parallel, backward-sequential. However, the newly developed generalized update has been studied very poorly. The contribution summarizes the principle of MPA and defines the equations following from the MPA concept. Two different solutions of the matrix algebra are presented: by Hrabák and Krbálek (2014) from unpublished PhD Thesis, and Brankov et. al (2017). Both concepts are compared and (dis)advantages and limitations discussed.

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