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Maximum of Dyson Brownian motion and TASEP.

ABSTRACT: The time dependent fluctuation properties of totally asymmetric simple exclusion process (TASEP) can be studied using the combinatorics and random matrix theory. In this presentation, we show a relation between the maximum of Dyson's Brownian motion (DBM) and DBM with a boundary. We explain how this is obtained by considering the diffusion scaling limit of TASEP with two hopping rates.