

Extreme statistics of some non-colliding Brownian processes

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I will discuss the limit behaviour of the extremal particle in certain non-colliding particle systems driven by Brownian noise. The key example is drifted Brownian motions conditioned not to collide and related model of eigenvalues of random matrices. The limit theorems can be established by way of Fredholm determinant formulas for the law of the trajectory of the extremal particle. I will also discuss the relationship of these limit theorems to the KPZ universality class.