

The line ensemble of the XXZ chain and KPZ fluctuations

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The 2D statistical mechanics of the XXZ chain is a system of nonintersecting random walks, where Δ regulates the interaction between the lines ($\Delta = 0$ is free fermion, $\Delta > 0$ attractive, $\Delta < 0$ repulsive). KPZ fluctuations are expected to show at the stochastic line and at facet edges. We discuss earlier results and explain more recent progress to establish such behavior.

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