

The KPZ Equation: Lattice Discretizations and Replica

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The KPZ equation is a stochastic PDE describing surface growth. Recently, in one space dimension and for sharp wedge initial data, the one-point height distribution was computed with the long time behavior given in terms of the Tracy-Widom GUE distribution. In the attempt to progress towards multi-point distributions we discuss various spatial lattice discretizations and the replica approach.