

Random Tilings, Random Partitions and Stochastic Growth Processes
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Around lozenge tilings of a hexagon

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Abstract

The talk is about random uniformly distributed lozenge tilings of a hexagon also known as boxed plane partitions or 3d Young diagrams confined to a box. We will present results of two kinds: Computation of the bulk limit of the correlation functions as the hexagons become large, and construction of a simple Markov chain (shuffling algorithm) that relates random tilings of hexagons of various sizes.