



Hamilton Institute

Dimer Configurations and Interlaced Particles on the Cylinder, and Interlacing with RSK-type Dynamics

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Tuesday, April 24th, 2007

Abstract

A dimer configuration of a graph is a subset of the edges, such that every vertex is contained in exactly one edge of the subset. We consider dimer configurations of the honeycomb lattice on the cylinder, which are known to be equivalent to configurations of interlaced particles. Assigning a measure to the set of all such configurations, we show that the probability that particles are located in any subset of points on the cylinder can be written as a determinant, i. . that the process is determinantal.

We also examine Markov chains of interlaced particles on the circle, with dynamics equivalent to RSK.

Venue: Seminar Room, Hamilton Institute, Rye Hall,
NUI Maynooth

Time: 1.00 - 2.00pm (followed by tea/coffee)

Travel directions are available at www.hamilton.ie



CC Ireland Chapter