

Contribution Title:	PATH TRANSFORMATIONS OF BROWNIAN MOTION CONNECTED WITH RANDOM MATRICES AND RE- PRESENTATION THEORY
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Invited speaker:	Topical session
YRS seminar:	NO

I will describe some recent work in which we introduce certain path-transformations of Brownian motion which have remarkable properties from both algebraic and probabilistic points of view. These are closely related to random matrices and representation theory, and have applications to directed percolation. I will also discuss a 'finite-temperature' version of this framework which is related to the quantum Toda lattice and has applications to a directed polymer model in 1+1 dimensions.