DANIEL REMENIK, University of Toronto

The endpoint distribution of directed polymers in 1+1 dimensions

Directed polymers in 1+1 dimensions belong to the KPZ universality class, a class of models including also some random growth models and interacting particle systems which feature an unusual size and scale of fluctuations, with distributions which are often related to random matrix theory. In this talk I will describe how to obtain a formula for the endpoint distribution of a point-to-line polymer, which is obtained as the distribution of the argmax of the Airy_2 process minus a parabola. The derivation uses a formula for the continuum statistics of the Airy_2 process.

This is joint work with Ivan Corwin, Gregorio Moreno Flores and Jeremy Quastel.