Seminar/Talk

The Brownian Web Distance

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The random walk web distance is a natural directed distance on the trajectory of coalescing simple random walks. It is given by the number of jumps between different random walk paths when one is only allowed to move in one direction. The Brownian web distance is the scale-invariant limit of the random walk web distance and it can be described in terms of the Brownian web. It is integer-valued and has scaling exponents 0:1:2 as compared to 1:2:3 in the KPZ world. The shear limit of the Brownian web distance is still given by the Airy process. A weighted version of the random walk web distance converges to a new explicit distribution that interpolates between the Gaussian and the GUE Tracy-Widom distribution. Based on joint work with Blint Virg.

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