
SARAI HERNANDEZ TORRES, University of British Columbia

Scaling limits of uniform spanning trees in three dimensions

Wilson's algorithm allows efficient sampling of the uniform spanning tree (UST) by using loop-erased random walks. This connection gives a tractable method to study the UST. The strategy has been fruitful for scaling limits of the UST in the planar case and in high dimensions. However, three-dimensional scaling limits are far from understood. In this talk, I will discuss recent advances on this problem. I will show that rescaled subtrees of the UST in three dimensions converge to a limiting object.

This work is part of ongoing joint work with Omer Angel, David Croydon, and Daisuke Shiraishi.