

Scaling limit of the radial Poissonian web

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Resumo/Abstract:

Joint work with Luiz Renato Fontes. We consider a variant of the radial spanning tree introduced by Baccelli and Bordenave. Like the original model, our model is a tree rooted at the origin, built on the realization of a planar Poisson point process. Unlike it, the paths of our model have independent jumps. We show that locally our diffusively rescaled tree, seen as the collection of the paths connecting its sites to the root, converges in distribution to the Brownian Bridge Web, which is roughly speaking a collection of coalescing Brownian bridges starting from all the points of a planar strip perpendicular to the time axis, and ending at the origin.