

Unité de Probabilités

Conférence de Rongfeng Sun

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Rongfeng Sun
french only

SÉMINAIRE DE PROBABILITÉ

Jeudi 28 avril 2005 à 16h15
[MA 12](#), EPFL, Ecublens

Rongfeng Sun

[Eurandom](#)

Convergence of Coalescing Nonsimple Random Walks to the Brownian Web.

Résumé

The Brownian Web (BW) is a family of coalescing Brownian motions starting from every point in space and time $\mathbf{R} \times \mathbf{R}$. It was first introduced by Arratia, and later analyzed in detail by Tölth and Werner. More recently, Fontes, Isopi, Newman and Ravishanker gave a characterization of the BW, and general convergence criteria allowing either crossing or noncrossing paths. For the noncrossing paths case, the convergence has been verified for coalescing simple random walks (FINR) and a two dimensional Poisson Tree (Fontes, Ferrari, Wu). In this work, we establish the convergence of general coalescing random walks to the Brownian web, which is the first model with crossing paths that has been shown to converge to the Brownian web. Some implications for voter models will be discussed.

Compléments

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