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Time: 2022.03.29 10:00-11:00

Title: The Baxter permuton and Liouville quantum gravity

Abstract: The Baxter permutations were introduced by Glen Baxter in 1964. As classical examples of pattern-avoiding permutations, it has deep connection with various other interesting combinatorial structures, such as bipolar orientations, walks in cones, certain pairs of binary trees. It has been proved that the Baxter permutation has a scaling limit, namely a random measure on $[0,1]^2$ called the Baxter permuton. In this talk, we shall first recall the discrete bijections between the Baxter permutation and their related objects, and then discuss the corresponding scaling limits, which involves the mating of trees and Liouville quantum gravity. Finally, based on the LQG description and SLE techniques, we are going to discuss the intensity of the Baxter permuton and the almost surely positive occurrence of any pattern in our recent work <https://arxiv.org/abs/2203.12176>.

Tencent Meeting: 852-004-880

<https://voovmeeting.com/dm/IXMbatr82M7>