



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE  
Geometric Functional Analysis and Probability Seminar

Room 261 ,Ziskind Building  
on Thursday, Jul 30, 2015  
at 11:05

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Stationary Eden model on groups

Abstract:

We consider two stationary versions of the Eden model, on the upper half planar lattice, resulting in an infinite forest covering the half plane. Under weak assumptions on the weight distribution and by relying on ergodic theorems, we prove that almost surely all trees are finite. Using the mass transport principle, we generalize the result to Eden model in graphs of the form  $G \times \mathbb{Z}$ , where  $G$  is a Cayley graph. This generalizes certain known results on the two-type Richardson model, in particular of Deijfen and Häggström in 2007.