

$$S_t \circ c(h)(a_s)_{ti} c(s) + \mathfrak{S}_e m^i n(a_r)$$

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Dynamical Percolation on General Trees

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Häggström, Peres, and Steif (1997) have introduced a dynamical version of percolation on a graph G . When G is a tree they derived a necessary and sufficient condition for percolation to exist at some time t . In the case that G is a spherically symmetric tree, Peres and Steif (1998) derived a necessary and sufficient condition for percolation to exist at some time t in a given target set D . The main result of the present talk is a necessary and sufficient condition for the existence of percolation, at some time $t \in D$, in the case that the underlying tree is not necessary spherically symmetric. This answers a question of Yuval Peres (personal communication). We present also calculations of the Hausdorff dimension of exceptional times of percolation.

The first third of this talk will be geared toward a general audience and requires only a basic understanding of probability theory.