
GORDON SLADE, University of British Columbia, Vancouver

Invasion percolation on a tree

Invasion percolation is a stochastic growth process which produces a random infinite subgraph—the invaded region—of a given infinite graph G . We consider the case where G is a regular tree and study the large-scale properties of the invaded region. Viewed far from the origin, the invaded region looks locally like a large critical percolation cluster. But surprisingly, we prove that the global structure of the invaded region is dramatically different than that of the incipient infinite percolation cluster.

This is joint work with O. Angel, J. Goodman and F. den Hollander.