

Title: The contact process on a one-dimensional dynamical percolation environment

Abstract: The contact process was introduced by Harris in 1974 as a model for the propagation of an infection through a host network, and since then much effort has been placed in understanding its behavior on different classes of graphs. While during the last decade there has been interest in understanding what happens if the network is chosen at random, only recently there have been some approaches considering the behavior of the process when the network itself evolves randomly.

In this talk we study some aspects of the contact process running on the one-dimensional lattice under dynamical bond percolation. In particular we address the question of how increasing the speed of the evolution of environment may aid in the survival the process. We also present a more complex evolving network where, based on preliminary results, we believe the same results should hold.