Geometric Random Graphs

Amitai Linker (UJM)

Title: The contact process on stationary dynamic networks

Abstract: The contact process is a particle system introduced by Ted Harris as a simple toy model for the spread of disease on a network. Governed by simple rules, this process has been widely studied over more than 40 years on a number of different networks such as lattices, trees, the configuration model and the preferential attachment model, to name a few. We will address the question of survival and extinction on each of these examples, and then ask what could be the effect of adding some stationary dynamics to the networks. We will show two examples in which the addition of dynamics hurt and benefit the infection, respectively.
(Joint work with E. Jacob, P. Mörters and D. Remenik)