

Percolation

Friday, 6 March 2020 16:15 (45 minutes)

Percolation studies the behaviour of clusters in random graphs. It has applications to modeling phenomena as diverse as magnetism, spread of infectious diseases, and the adaption of new technologies in society. This talk will give a brief overview of the theory of percolation, starting from the celebrated Harris-Kesten theorem on percolation in the square lattice in two dimensions. We will in particular consider tools used to study percolation in random geometric graphs and the configuration model. Finally, we will consider what new questions arise when we drop the independence requirement from the standard percolation process.

Presenter: STRÖMBERG, Johanna (Uppsala University)