Recent Results in Network Reliability

Jason I. Brown, Dalhousie University

Network reliability is a probabilistic model of a graph's robustness to independent failures of either edges or vertices (or both); under a variety of scenarios, the functions turn out to be polynomials that encode important combinatorial information. In this talk we will survey some recent results, focusing particular attention on the roots of these polynomials.

Keywords: network reliability, polynomial, root, fractal