1146-05-24Deepak Bal, Patrick Bennett, Sean English* (sean.english@ryerson.ca), Calum
MacRury and Pawel Pralat. Zero Forcing of Random Regular Graphs.

The zero forcing process is an iterative graph coloring process in which at each timestep a colored vertex with a single uncolored neighbour can force this neighbour to become colored. A Zero forcing set of a graph is an initial set of colored vertices that can eventually force the entire graph to be colored. The zero forcing number is the size of the smallest zero forcing set.

In this talk, we will give a brief background on zero forcing numbers, then explore the zero forcing number for random regular graphs using a degree-greedy algorithm and the differential equations method. (Received December 03, 2018)