

RYERSON UNIVERSITY
DEPARTMENT OF MATHEMATICS
GRAPHS AT RYERSON (G@R) SEMINAR
Drs. Sean English and Bogumił Kamiński

Date: Wednesday, January 16, 2018
Time: 2:30pm
Location: ENG 210

Zero Forcing for Random Regular Graphs

Abstract:

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, Dr. English 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 so-called differential equations method, and then Dr. Kamiński will discuss some of the computational difficulties in using the differential equations method.

This project is joint work with Deepak Bal, Patrick Bennett, Calum MacRury, and Paweł Prałat.

ALL FACULTY, STAFF, STUDENTS AND GUESTS ARE WELCOME TO ATTEND