

# *Talk Math 2 Me*

Graph Theory: Zero Forcing and Power Domination

Esther Conrad  
Friday October 13, 2017  
DERR 329  
12:00pm- 1:00pm

## **Abstract**

In graph theory, a graph  $G$  is an ordered pair of sets  $G = (V, E)$ , where  $V$ , is a set of vertices, and  $E$  is a set of pairs of vertices. The study of graphs in this context can be used to model pairwise relations between objects. Zero forcing and power domination are graph processes that can be described through vertex coloring propagation, with color change rules. This talk will consist of a brief overview of graph theory, power domination, zero forcing, and some known results on these processes.

This seminar is sponsored in part by Pi Mu Epsilon and the Texas State University Department of Mathematics. For more information or to sign up to speak, contact Ellen Robinson at [ebr21@txstate.edu](mailto:ebr21@txstate.edu).