## **VCU** Discrete Mathematics Seminar

New and Old Results on  $\alpha$ -critical Graphs

## Prof Craig Larson (VCU!)

Wednesday, Oct. 18 1:00-1:50 EST

## In person! in 4145 Harris Hall, and Zoom @ https://vcu.zoom.us/j/92975799914 password=graphs2357



A graph G is  $\alpha$ -critical if the removal of any edge *e* yields a graph with a larger independence number; that is, if  $\alpha(G - e) > \alpha(G)$ . These graphs are of interest in the investigation of the independence structure of a graph, and theorems date back to the 1960s.

We recount some of these—and discuss some new ones. These arose from an investigation of Deming's algorithm for identifying König-Egerváry graphs.

This is joint work with Mark Kayll.

For the DM seminar schedule, see: https://go.vcu.edu/discrete