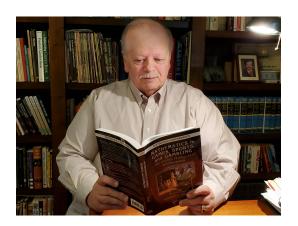
## VCU Discrete Mathematics Seminar

## Results on saturation spectrum

## **Prof Ron Gould Emory University**

Wednesday, Feb. 1 1:00-1:50 EST

Zoom! @ https://vcu.zoom.us/j/92975799914 password=graphs2357



Given a graph H, a graph G of order n is said to be H-saturated provided G contains no copy of H, but the addition of any missing edge to G creates a copy of H.

The maximum size (|E(G)|) of an H-saturated graph is called the extremal number of H, while the minimum size is called the saturation number. For graphs with chromatic number at least three the extremal number is known to be quadratic in n, while the saturation number is known to be linear in n.

This opens the question of what sizes between the extremal number and the saturation number are possible for an H-saturated graph? The set of all possibles sizes of an H-saturated graph of order n is called the saturation spectrum of H. In this talk I will discuss some of the known results in this area.

For the DM seminar schedule, see:

https://go.vcu.edu/discrete