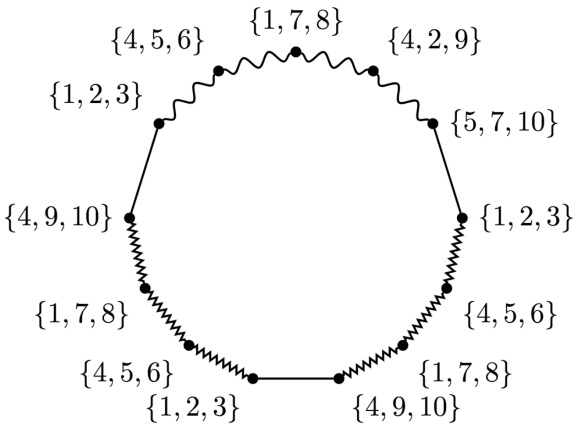
VCU Discrete Mathematics Seminar

The t-Tone Chromatic Number

Hudson LaFayette
(VCU)

Wednesday, April 19
1:00-1:50 EDT

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



A proper vertex coloring of a graph assigns each vertex a single color so that no edge has the same color on each of its endpoints. The minimum number of colors needed to properly vertex color a graph G is called the chromatic number of G. In this talk we will discuss a generalization of this concept called t-*tone coloring*. In this context, each vertex is assigned a set of colors of size t and vertices that are distance d from one another share at most $d-1$ colors. Denoted by τ_t the t-*tone chromatic number* is the minimum number of colors needed to t-tone color a graph. In this talk we will discuss some known results, connections to other areas of math, and some open problems.

For the DM seminar schedule, see:

`https://go.vcu.edu/discrete`