

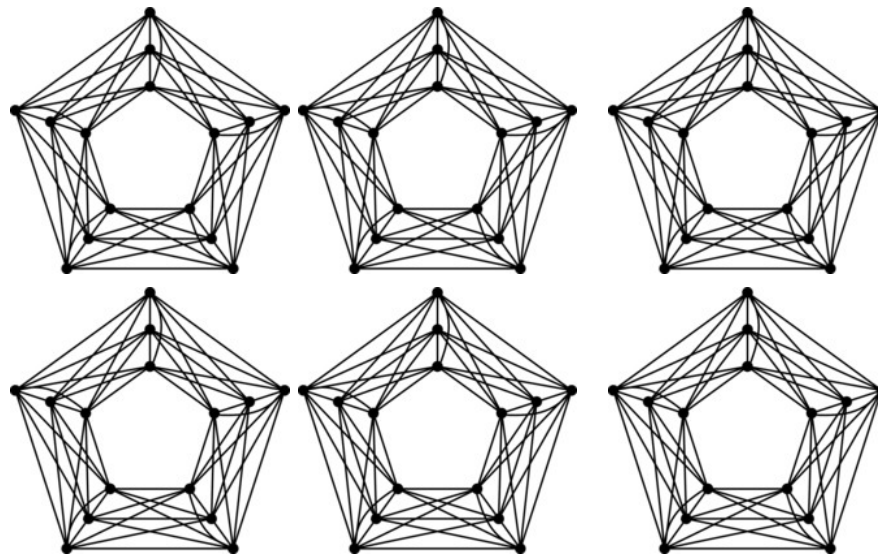
VCU Discrete Mathematics Seminar

*Coloring (P_5, gem) -free graphs
with $\Delta - 1$ colors.*

Hudson LaFayette
VCU!

Wednesday, April 21
1:00-1:50

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



The Borodin–Kostochka Conjecture states that for a graph G , if $\Delta(G) \geq 9$ and $\omega(G) \leq \Delta(G) - 1$, then $\chi(G) \leq \Delta(G) - 1$. This conjecture is a strengthening of Brooks' Theorem and while known for certain graph classes it remains open for general graphs. In this talk we prove the Borodin-Kostochka Conjecture for (P_5, gem) -free graphs, i.e. graphs with no induced P_5 and no induced $K_1 \vee P_4$.

For the DM seminar schedule, see:

<https://www.people.vcu.edu/~nobushaw/dms.html>