

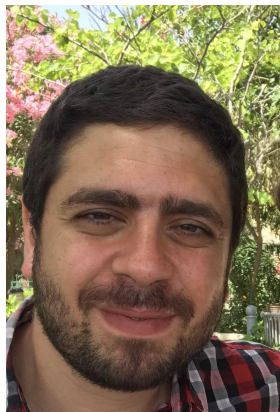
# VCU Discrete Mathematics Seminar

## *Colorings and decompositions of planar graphs*

**Carl Feghali**  
**Charles University (Czech Republic)**

Wednesday, Mar. 31  
1:00-1:50

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



In this talk, I review some of the results and proof methods on colorings, list colorings and decompositions of planar graphs, triangle-free planar graphs and planar graphs of girth 5. I end the talk by discussing some recent partial progress, obtained in joint work with Robert Šámal, on a possible strengthening suggested by Kawarabayashi and Thomassen, of the celebrated Grötzsch's theorem that every triangle-free planar graph is 3-colorable.

For the DM seminar schedule, see:

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