VCU Discrete Mathematics Seminar

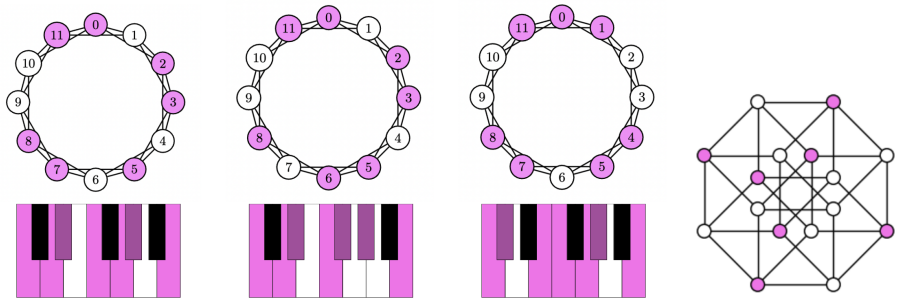
I heard there was a secret chord...

Prof Neal Bushaw
(VCU!)

Wednesday, April 17
1:00-1:50 EDT

4145 Harris Hall, and on Zoom

`https://vcu.zoom.us/j/92975799914`
`password=graphs2357`



What is a musical chord, to a discrete mathematician? What about a scale, or a rhythm? In this talk, we explore these (and other) mathematical versions of musical notions, with a focus on problems that seem like combinatorics. How many scales or chords are there with some specified property? How can we measure a scale, chord, or rhythm? Can we enumerate all chords (and thus find Cohen's *Secret Chord*)? Can we use any of this to make drum machines? We'll see surprising connections between these musical notions, and glimpse the tip of a mathematical iceberg which began with the study of wealth inequality by Muirhead and Lorenz in the early twentieth century, and which was later expanded by mathematical titans Schur, Littlewood, Hardy, and Polyá.

For the DM seminar schedule, see:

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