## VCU Discrete Mathematics Seminar

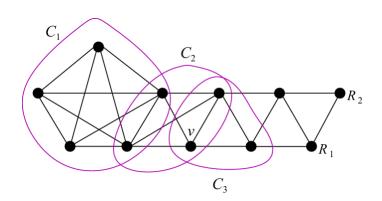
## Cops and Robber: When the Cops Need Reading Glasses

## **Prof Nancy Clarke** (Acadia University)

Wednesday, Feb. 19 1:00-1:50 EDT

On Zoom! with a watch party in 4145 Harris Hall. Zoom info: https://vcu.zoom.us/j/92975799914 password=graphs2357





We consider a variation of the pursuit-evasion game Cops and Robber in which the robber is invisible to the cop side unless outside the neighbour-hood of at least one of the cops. Our parameter of interest, the hyperopic copnumber, is analogous to the copnumber; i.e. the hyperopic copnumber of a graph G is the minimum number of cops that suffice to guarantee a win on G. We present a variety of results, including a characterization of the graphs with hyperopic copnumber 1. We also characterize those graphs with largest possible hyperopic copnumber, and consider graphs in terms of diameter and planarity.

For the DM seminar schedule, see:

https://go.vcu.edu/discrete