1150-05-610 **Anthony Bonato**, **Jane Breen**, **Boris Brimkov**, **Joshua Carlson**, **Sean English**, **Jesse Geneson**, **Leslie Hogben**, **Katherine Perry*** (kperry56@du.edu) and **Carolyn Reinhart**.
Throttling for the Game of Cops and Robbers on Graphs.

The game of Cops and Robbers is a pursuit-evasion game played on a reflexive graph in which a cop or set of cops attempt to catch a single robber. The game is played over a countable sequence of time-steps in which the cops and robber take turns moving along the edges of the graph to neighboring vertices. In this talk, we consider the *cop-throttling* number of a graph G, $th_c(G)$, which is defined to be the minimum of $(k + capt_k(G))$, where k is the number of cops and $capt_k(G)$ is the minimum number of rounds needed for k cops to capture the robber on G over all possible games. We provide some tools for bounding the cop-throttling number and investigate the cop-throttling number for some classes of graphs. Of particular interest is the class of chordal graphs (graphs with no induced cycle of length greater than 3). (Received July 16, 2019)