NANCY CLARKE, Acadia University
Surrounding Cops and Robber

A variation of the Cops and Robber game is introduced in which the cops win by occupying each of the robber's neighbouring vertices. The surrounding copnumber is analogous to the copnumber. We present a variety of results for this parameter, including exact values for several classes of graphs as well as more general bounds. Classes of interest include graph products, graphs arising from combinatorial designs, and generalized Petersen graphs.

This is joint work with A. Burgess, R. Cameron, P. Danziger, S. Finbow, C. Jones, and D. Pike.