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Cops and Attacking Robbers: A Shift in Power

The game of Cops and Attacking Robbers was first introduced in 2013 by Bonato, Finbow, Gordinowicz, Haidar, Kinnersley, Mitsche, Pralat and Stacho. In this Cops and Robbers game variant, the robber is empowered to attack a cop in the same way a cop can capture the robber. In a graph G, the number of cops required to capture a robber in the Cops and Attacking Robbers game is denoted by cc(G). In this talk, we will discuss new results for graphs with specific cycle constraints. We will conclude the talk with several open problems. This is joint work with Alex Clow and Margaret-Ellen Messinger.