
WILLIAM KINNERSLEY, University of Rhode Island

Infinitely fast robbers on grids

Recently, there has been considerable interest on variants of Cops and Robbers in which the robber is more mobile than the cops. In the *infinite-speed robber* variant, the robber may, on their turn, traverse an arbitrarily long cop-free path. In this talk, we present some recent work on this game. In particular, we determine the infinite-speed cop number of two-dimensional Cartesian grids up to a small additive constant, and we give asymptotic bounds for several families of grid-like graphs, including higher-dimensional Cartesian grids and hypercubes. This is joint work with Niko Townsend.