

Graduate Seminar in Mathematics

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Thursday, January 22, 2015
1:00pm - 2:00pm, HH 3017

Some models of graph searching

Abstract:

In this talk, we will introduce several pursuit-evasion models in which a number of agents, called cops, move in a graph to capture a fast invisible intruder called a robber, who can stop on the vertices or edges of the graph. The most basic question becomes, "How few cops are needed to guarantee capture of the robber?" We will examine the mathematics behind this well-studied model, and introduce several others that depend on the passage of time.