1163-05-291Anthony Bonato* (abonato@ryerson.ca), Department of Mathematics, Ryerson University,
Toronto, Ontario M5B2K3, Canada. The localization number of a graph.

Graph searching investigates combinatorial models for the detection or neutralization of an adversary's activity on a network. One such model is the {localization game}, where agents use distance probes to capture an invisible intruder. We present new results on the {localization number} of a graph, which is the minimum number of agents needed to capture the intruder. We give bounds on the localization number of incidence graphs of designs, Kneser graphs, and polarity graphs. In many cases, these bounds are tight. (Received September 01, 2020)