

Constrained Graph Searching Problems

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In this talk, we consider the edge searching problem and the fast searching problem with constraints on vertices. The edge searching problem was introduced by Megiddo et al. in 1988, and the fast searching problem was introduced by Dyer et al. in 2008. We present polynomial time algorithms for computing the minimum number of searchers required to capture an invisible robber on trees under different constraints.

Keywords: graph searching, edge searching, fast searching