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Logarithmic bounds on the threshold strong dimension of a graph

A set W of vertices of a connected graph G is a *strong resolving set* for G if, for every pair of vertices, one of the vertices in the pair lies on a shortest path from the other vertex to some vertex of W . The smallest cardinality of a strong resolving set of vertices of G is the *strong dimension* of G . The *threshold strong dimension* of G is the smallest strong dimension among all graphs having G as a spanning subgraph. We establish logarithmic bounds on the threshold strong dimension for graphs in general, and for trees.