

## Metric dimension of bipartite graphs

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A resolving set of a connected graph  $G$  is a set  $\{w_1, w_2, \dots, w_k\}$  of vertices of  $G$  with the property that every vertex  $v$  of  $G$  is uniquely determined by the distances  $d(w_1, v), d(w_2, v), \dots, d(w_k, v)$ . The metric dimension of  $G$  is the cardinality of a smallest resolving set.

In this talk we present upper bounds on the number of vertices of a graph in terms of metric dimension and diameter for various graph classes. In particular we determine the maximum order of a bipartite graph with given diameter and metric dimension.

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