

## Title

Non-Isolated Resolving Number for Some Splitting Graphs.

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## Abstract

Let  $G$  be a connected graph. Let  $W = \{w_1, w_2, \dots, w_k\}$  be a subset of  $V$  with an order imposed on it. For any vertex  $v \in V$ , the vector  $r(v|W) = (d(v, w_1), d(v, w_2), \dots, d(v, w_k))$  is called the metric representation of  $v$  with respect to  $W$ . If distinct vertices in  $V$  have distinct metric representation, then  $W$  is called a resolving set of  $G$ . The minimum cardinality of a resolving set of  $G$  is called the metric dimension of  $G$  and it is denoted by  $\dim(G)$ . A resolving set  $W$  is called a non-isolated resolving set if the induced sub graph  $hW_i$  has no isolated vertices. The minimum cardinality of a non-isolated resolving set of  $G$  is called the non-isolated resolving number of  $G$  and is denoted by  $nr(G)$ . In this paper, we determine the non-isolated resolving number for the splitting graph of some standard graphs.

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