

## ABOUT UNIVERSAL $\gamma_2$ -FIXERS TREES

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A set of vertices  $D$  of a graph  $G$  is a *distance 2-dominating* set of  $G$  if the distance between each vertex  $u \in (V(G) - D)$  and  $D$  is at most two. Let  $\gamma_2(G)$  denote the size of a smallest distance 2-dominating set of  $G$ .

For any permutation  $\pi$  of the vertex set of  $G$ , the *prism of  $G$  with respect to  $\pi$*  is the graph  $\pi G$  obtained from two copies  $G_1$  and  $G_2$  of  $G$  by joining  $u \in V(G_1)$  and  $v \in V(G_2)$  if and only if  $v = \pi(u)$ . If  $\gamma_2(\pi G) = \gamma_2(G)$  for any permutation  $\pi$  of  $V(G)$ , then  $G$  is called a universal  $\gamma_2$ -fixer. In this work we study the property to be universal  $\gamma_2$ -fixers for trees.