
KIEKA MYNHARDT, University of Victoria
Edgeless Graphs are the Only Universal Fixers

For any permutation π of the vertex set $V(G)$ of a graph G , the generalized prism πG of G is obtained from two copies G' and G'' of G by joining $u \in V(G')$ and $v \in V(G'')$ if and only if $v = \pi(u)$. Denote the domination number of G by $\gamma(G)$. For all permutations π of $V(G)$, $\gamma(G) \leq \gamma(\pi G) \leq 2\gamma(G)$. If $\gamma(\pi G) = \gamma(G)$ for all π , then G is called a universal fixer.

The problem of finding universal fixers was first posed by Diana (Weizhen) Gu [Personal communication to S. T. Hedetniemi, 30th South-Eastern Conference on Graph Theory and Combinatorics, Florida Atlantic University, USA, March 1999], and Mynhardt and Xu [Domination in prisms of graphs: Universal fixers, *Utilitas Math.* 78(2009), 185-201] conjectured that edgeless graphs are the only universal fixers. This conjecture was recently settled by Kirsti Wash, Clemson University, South Carolina. We present the history and resolution of this conjecture.