

Throttling for metric dimension and its variants

Boris Brimkov, Slippery Rock University

Joint work with Peter Diao, Jesse Geneson, Carolyn Reinhart, Shen-Fu Tsai, William Wang, and Kyle Worley

In this talk, we introduce throttling for metric dimension and several of its variants. We show that computing the metric dimension throttling number is NP-hard, give formulas for the throttling numbers of special families of graphs, characterize graphs with extremal throttling numbers, and give bounds on the minimum possible throttling number of a graph or tree of given order. Some connections to throttling for zero forcing and related parameters are discussed as well.

Keywords: metric dimension, throttling