1146-05-170 **Robert A. Beeler*** (beelerr@etsu.edu), **Teresa W. Haynes** and **Rodney L. Keaton**.
Domination Cover Rubbling.

Let G be a connected simple graph with vertex set V and a distribution of pebbles on V. The domination cover rubbling number of G is the minimum number of pebbles, so that no matter how they are distributed, it is possible that after a sequence of pebbling and rubbling moves, the set of vertices with pebbles is a dominating set of G. We begin by characterizing the graphs having small domination cover rubbling numbers and determining the domination cover rubbling number of several common graph families. We then give a bound for the domination cover rubbling number of trees and characterize the extremal trees. Finally, we give bounds for the domination cover rubbling number of graphs in terms of their domination number and characterize a family of the graphs attaining this bound. (Received January 20, 2019)