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Daniel Cranston, Luke Postle, Chenxiao Xue and Carl Yerger*
(cayerger@davidson.edu). *Class 0 and Complexity Bounds for Graph Pebbling.*

Given a configuration of pebbles on the vertices of a connected graph G , a *pebbling move* removes two pebbles from some vertex and places one pebble on an adjacent vertex. The *pebbling number* of a graph G is the smallest integer k such that for each vertex v and each configuration of k pebbles on G , there exists a sequence of pebbling moves that places at least one pebble on v . If the pebbling number of G equals the number of vertices of G , we say the graph is *Class 0*. In this talk, we investigate and improve on bounds related to the minimum number of edges in a Class 0 graph via a discharging approach. We also discuss some recent results related to the complexity of the Class 0 decision problem for specific classes of graphs. (Received February 12, 2018)