1116-05-1311 **Daniel W Cranston**, **Luke Postle**, **Chenxiao Xue*** (chxue@davidson.edu) and **Carl Yerger**. *Class 0 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 a graph G equals the number of vertices in G, we say that the graph is Class 0. In this talk, we investigate the minimum number of edges in a Class 0 graph on n vertices. Via a discharging-based technique, we conclude that any Class 0 graphs with n vertices have at least $5n/3 - 11/3$ edges, and that any diameter 2 Class 0 graphs have at least $2n - 5$ edges. We also show that the $2n - 5$ bound for diameter 2 Class 0 graphs is best possible and characterize the graphs where this bound holds. (Received September 18, 2015)