1171-05-137 Adam M Blumenthal* (blumenam@westminster.edu) and Michael Young. Independent Domination Ratio in Large Regular Graphs. Preliminary report.

A set of vertices in a graph G is said to be an independent dominating set if it is both independent and dominating. The size of a smallest independent dominating set is called the independent domination number, denoted i(G). In 1964 Rosenfeld proved that for all regular graphs, $i(G)/n \leq \frac{1}{2}$. Bounds on i(G)/n have been studied for regular graphs mostly of small degree and in almost all cases are still unresolved. We will discuss some bounds on i(G)/n, particularly for graphs of large degree. (Received August 09, 2021)