1138-05-232 **Bing Wei*** (bwei@olemiss.edu), Department of Mathematics, University of Mississippi, University, MS 38677. *On domination and independent domination in graphs.*

For a graph $G = (V, E)$, a subset D of V is called a dominating set if every vertex not in D is adjacent to at least one vertex in D. If a dominating set D is an independent set, that is, no edge between any two vertices in D, then D is called an independent dominating set. Let $\gamma(G)$ and $i(G)$ denote the number of vertices in a smallest dominating set and in a smallest independent dominating set of G, respectively. In this talk, some lower and upper bounds on both $\gamma(G)$ and $i(G)$ will be presented, several results on our recent outcomes about the relationships between $\gamma(G)$ and $i(G)$ will be introduced and related research problems will be proposed. (Received February 10, 2018)