Bipartite Versions of Domination and Independence

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We consider bipartite versions of the graph parameters independence number and independent domination number. Specifically, we investigate the bipartite domination number as the smallest size of a dominating set that induces a bipartite subgraph, the lower bipartite number as the smallest order of a maximal induced bipartite subgraph, and the bipartite number as the largest order of an induced bipartite subgraph. We provide results comparing and contrasting the parameters, and discuss graphs where they are equal. This includes joint work with Anna Bachstein, Michael Henning, and others.