Independent Bondage Number for Planar Graphs

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Given a simple finite graph G, a vertex subset $D \subseteq V(G)$ is said to be a dominating set of G if every vertex $v \in V(G) - D$ is adjacent to a vertex in D. The independent domination number $\gamma^i(G)$ is the minimum cardinality among all independent dominating sets of G, and the independent bondage number $b_i(G)$ is the minimum cardinality among all edge sets E' of G such that $\gamma^i(G - E') > \gamma^i(G)$. In this talk, we make use of the discharging method and provide a constant upper bound for the independent bondage number of planar graphs with minimum degree at least 3.

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