



THE UNIVERSITY of
MISSISSIPPI

Department of Mathematics

AMS Graduate Student Seminar

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Independent Bondage Number of Planar Graphs with Minimum Degree at Least 3

Friday, February 26, 2021

1:00PM on Zoom

Meeting ID: 960 1290 4947

Passcode: AMS

Abstract: Given a simple finite graph G , a vertex subset $D \subset V(G)$ 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 $\gamma^i(GE) > \gamma^i(G)$. 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.