NEIGHBOR LOCATING COLORING ON THE PRODUCT OF GRAPHS

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Let G be a graph. A k-coloring of G is a partition $\pi = \{S_1, \cdots, S_k\}$ of $V(G)$ so that each S_i are independent set and take same color. A k-coloring $\pi = \{S_1, \cdots, S_k\}$ of $V(G)$ is a neighbor-locating coloring if any two vertices $u, v \in S_i$, there is a color class S_j for which, one of them has a neighbor in S_j and the other not. The minimum k with this property, is said to be neighbor-locating chromatic number of G, denote by $\chi_{NL}(G)$ of G.
In this talk we discuss on the neighbor-locating chromatic number of Cartesian and lexicographic product of two graphs.

References

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