Let $G = (V, E)$ be a simple graph. Let $S$ be a maximum independent set of $G$. A subset $T$ of $S$ is called a forcing subset if $T$ is contained in no other maximum independent subset in $G$. The independent forcing number of $S$ denoted by $fI(G, S)$ is the cardinality of a minimum forcing subset of $S$. The independent forcing number of $G$ is the minimum of the independent forcing
number of $S$, where $S$ is a maximum independent subset in $G$. The independent forcing spectrum of $G$ denoted by $\text{Spec}_I(G)$ is defined as the set $\text{Spec}_I(G) = \{k : \text{ there exists a maximum independent set } S \text{ of } G \text{ such that } f_I(G, S) = k\}$. In this paper, a study of $\text{Spec}_I(G)$ is made.

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Index Terms

Computer Science  Applied Mathematics

Key words

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Forcing independent spectrum of a graph.