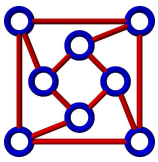

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DISTANCE MAGIC TYPES OF LABELINGS

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Let $G = (V, E)$ be a graph of order n. A *distance magic labeling* of G is a bijection $\ell\colon V \to \{1, 2, \ldots, n\}$ for which there exists a positive integer μ such that $\sum_{x \in N(v)} \ell(x) = \mu$ for all $v \in V$, where $N(v)$ is the open neighborhood of v. Moreover, we also consider a closed distance magic labeling as well as a Γ-distance magic labeling. Namely, in a *closed distance magic labeling* we take a sum of labels in closed neighborhood instead of open neighborhood of v. Whereas a Γ-*distance magic labeling* of a graph $G(V, E)$ with $|V| = n$ is an injection f from V to an Abelian group Γ of order n such that the weight $w(x) = \sum_{y \in N_G(x)} f(y)$ of every vertex $x \in V$ is equal to the same element $\mu \in \Gamma$. A graph G is called a *group distance magic* graph if there exists a Γ-distance magic labeling for every Abelian group Γ of order $|V(G)|$. The recent results in the topics will be presented in the talk.