

Cycle-antimagic graphs

Andrea Semaničová-Feňovčíková

A simple graph G admits an H -covering if every edge in $E(G)$ belongs to a subgraph of G isomorphic to H . An (a, d) - H -antimagic total labeling of a graph G admitting an H -covering is a bijective function from the vertex set $V(G)$ and the edge set $E(G)$ of the graph G onto the set of integers $\{1, 2, \dots, |V(G)| + |E(G)|\}$ such that for all subgraphs H' isomorphic to H , the sum of labels of all the edges and vertices belonged to H' constitute the arithmetic progression with the initial term a and the common difference d . Such a labeling is called *super* if the smallest possible labels appear on the vertices.

In this talk, we will deal with the existence of the super (a, d) - H -antimagic total labelings of wheels, fan graphs and ladders for H isomorphic to a cycle.

Affiliation

Department of Applied Mathematics and Informatics, Technical University, Košice, Slovak Republic andrea.fenovcikova@tuke.sk