ON SUPER ANTIMAGIC LABELINGS OF TREES

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A *labeling* of a graph is any map that carries some set of graph elements to numbers (usually to the positive integers). Magic labelings are one-to-one maps onto the appropriate set of consecutive integers starting from 1, with some kind of "sum" property. An *edge-magic total labeling* on a graph with p vertices and q edges is defined as a one-to-one map taking the vertices and edges onto the integers $1, 2, \ldots, p + q$ with the property that the sum of the label on an edge and the labels of its endpoints is constant independent of the choice of edge. If the sums of the labels on the edges and the labels of their endpoints form an arithmetic progression starting from a and having common difference d then the labeling is called (a, d)-*edge-antimagic total*. Such a labeling is called *super* if the smallest possible labels appear on the vertices

We will present super (a, d)-edge-antimagic total properties for a special class of trees called *path-like trees*.