Integer Antimagic Labeling for Cycle with One Chord

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For $k \geq 2$, a graph $G$ is called $Z_k$-antimagic if there exists a labeling of its edges $f : E(G) \rightarrow Z_k \setminus \{0\}$ such that the labels induced on the vertices given by the sums of the labels of the edges incident to each vertex are all distinct. For a given graph $G$, the integer antimagic spectrum is the set of all integers $k$ for which $G$ is $Z_k$-antimagic. This project focuses on characterizing the integer antimagic spectrum for a class of graphs $C_n(l)$, which are composed of a cycle and a chord inside the cycle, $C_n$. Our method consists of the alternating path and alternating cycle labelings and also previous results on the existence of $Z_k$-antimagic labelings of cycles.