The Mutual-Visibility Sets Graph

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Abstract

A subset $S \subseteq V(G)$ is a mutual-visibility set if for each pair of vertices $u, v \in S$, there exists a geodesic P such that $V(P) \cap S = \{u, v\}$. The *mutual-visibility sets graph* of a graph G, denoted by $\mathcal{MV}(G)$, is the graph whose vertices are all of the mutual-visibility sets of G, where two vertices of $\mathcal{MV}(G)$ are adjacent if they differ by one vertex or one edge of G. In this poster, we will give some properties of the graph $\mathcal{MV}(G)$ and an important result when G is a tree graph.