عنوان مقاله:

(Approachable graph (tree) and Its application in hyper (network

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خلاصه مقاله:

A hypertree is a special type of connected hypergraph that removes any, its hyperedge then results in a disconnected hypergraph. Relation between hypertrees (hypergraphs) and trees (graphs) can be helpful to solve real problems in hypernetworks and networks and it is the main tool in this regard. The purpose of this paper is to introduce a positive relation (as \alpha-relation) on hypertrees that makes a connection between hypertrees and trees. This relation is dependent on some parameters such as path, length of a path, and the intersection of hyperedges. For any q\in \mathbb{N}, we introduce the concepts of a derivable tree, (\alpha, q)-hypergraph, and fundamental (\alpha, q)-hypertree for the first time in this study and analyze the structures of derivable trees from hypertrees via given positive relation. In the final, we apply the notions of derivable trees, (\alpha, q)-trees in real optimization problems by modeling hypernetworks and networks based on hypertrees and trees, respectively.

کلمات کلیدی:

\alpha-Relation, Fundamental (\alpha, q)-hypergraph, k-Parts

لینک ثابت مقاله در پایگاه سیویلیکا: