

Decomposing complete graphs into unicyclic bipartite graphs with nine edges

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Let K be any graph, and let G be a subgraph of K . If it is possible to partition the edges of K into disjoint replicas of G , then we say that K allows a G -decomposition. It is known that if a graph G with n edges admits a labeling that satisfies certain properties, then the complete graphs of orders $2nk$ and $2nk + 1$ can be decomposed into disjoint copies of G for any integer k . I will be investigating the decomposition of complete graphs of orders $18k$ and $18k + 1$ into unicyclic bipartite graphs with nine edges.

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