DECOMPOSITION OF COMPLETE MULTIGRAPHS INTO STARS AND CYCLES

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Abstract

Let \( k \) be a positive integer, \( S_k \) and \( C_k \) denote, respectively, a star and a cycle of \( k \) edges. \( \lambda K_n \) is the usual notation for the complete multigraph on \( n \) vertices and in which every edge is taken \( \lambda \) times. In this paper, we investigate necessary and sufficient conditions for the existence of the decomposition of \( \lambda K_n \) into edges disjoint of stars \( S_k \)'s and cycles \( C_k \)'s.

Keywords: graph decomposition, complete multigraph, stars, cycles.

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References


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