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PERFECT SET OF EULER TOURS OF $K_{p,p,p}$

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Abstract

Bermond conjectured that if G is Hamilton cycle decomposable, then $L(G)$, the line graph of G, is Hamilton cycle decomposable. In this paper, we construct a perfect set of Euler tours for the complete tripartite graph $K_{p,p,p}$ for any prime p and hence prove Bermond's conjecture for $G = K_{p,p,p}$.

Keywords: compatible Euler tour, line graph, Hamilton cycle decomposition.

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