

HAMILTON CYCLES IN DOUBLE GENERALIZED PETERSEN GRAPHS

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Abstract

Coxeter referred to generalizing the Petersen graph. Zhou and Feng modified the graphs and introduced the double generalized Petersen graphs (DGPGs). Kutnar and Petecki proved that DGPGs are Hamiltonian in special cases and conjectured that all DGPGs are Hamiltonian. In this paper, we prove the conjecture by constructing Hamilton cycles in any given DGPG.

Keywords: double generalized Petersen graph, Hamilton cycle.

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