

Hamiltonian Cycles in $S_t(C_n \times C_m)$

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Let $C_n \times C_m$ be the Cartesian product of two directed cycles C_n and C_m . We form a new directed graph by modifying the directed edges of one of the m -cycles. There is a new directed edge from a vertex to another that were originally at a distance t apart, where $1 \leq t < m$. The original edges of the m -cycles are deleted. In this talk we present some sufficient conditions on when $S_t(C_n \times C_m)$ is hamiltonian.

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