

Manoussakis, Y.; Spyratos, M.; Tuza, Zsolt

Cycles of given color patterns. (English) Zbl 0839.05056
J. Graph Theory 21, No. 2, 153-162 (1996).

A 2-edge-colored complete graph K_n^c is a complete graph K_n with edges colored in colors 1 and 2. An (s, t) -cycle in K_n^c is a cycle of length $s + t$, in which s consecutive edges are in one color and the remaining t edges are in the other color. This paper gives a characterization for the existence of (s, t) -cycles in K_n^c and studies all possible (s, t) -cycles of length 4 and shows that K_n^c contains an (s, t) -Hamiltonian cycle unless it is isomorphic to a specified graph. This extends a result of A. Gyárfás.

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MSC:

05C38 Paths and cycles
05C15 Coloring of graphs and hypergraphs
05C45 Eulerian and Hamiltonian graphs

Cited in **2** Documents

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2-edge-colored complete graph; (s, t) -cycle; color

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