

Let G be a 2-edge-colored complete graph of even order n . A cycle of G is alternating if any two successive edges differ in color. We prove that there is a one-to-one correspondence between the set of bipartite tournaments of order n admitting a unique hamiltonian cycle and the set of 2-edge-colored complete graphs of order n admitting a unique alternating hamiltonian cycle. © 2002 Elsevier Science B.V. All rights reserved