## AL(k)-spectrum for Cycles and Related Graphs

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Let G be a graph with p vertices. For  $k \ge 2$ , G is said to have a k-steps traversal if there exist a sequence of vertices  $v_1, v_2, \ldots, v_p$ , such that the distance between  $v_i$  and  $v_{i+1}$  is equal to k for each  $i = 1, 2, \ldots, p-1$ . If the distance between  $v_p$  and  $v_1$  is also k, G is said to be k-steps Hamiltonian. The set of all positive integers k such that G has a k-steps traversal is called the AL(k)-spectrum. We investigate the AL(k)-spectrum for cycle graphs that are combined by a shared vertex.

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