

1135-VP-2819 **Jeannette Ramirez*** (jeannette.r.831@gmail.com), 15649 Kalisher street, Granada Hills, CA 91344. *Radio k -labeling of Cycles for Large k .*

In a graph G , the distance between vertices u and v , denoted $d(u, v)$, is the shortest path from u to v . A radio k -labeling of G , is a function $f : V \rightarrow \mathbb{N}_0$ that assigns to each vertex a non-negative integer label such that the separation of labels between any two vertices u and v is at least $k + 1 - d(u, v)$ for some fixed non-negative integer k . The span of the radio k -labeling f , is the difference between the smallest and largest labels assigned by f and the radio k number of G is the smallest possible span for any radio labeling of G . I will present my results on exact radio k values for cycle graphs when k is larger than diameter. (Received September 26, 2017)