1125-05-1999 **Sarah Loeb*** (sloeb2@illinois.edu) and **Douglas B. West**. *Circular Separation Dimension.*
Given a linear ordering σ of $V(G)$, a pair of non-incident edges is *separated* by σ if both vertices of one edge precede both vertices of the other. The *separation dimension* $\pi(G)$ of a graph G is the minimum size of a set of vertex orderings needed to separate every pair of non-incident edges of G. Given a circular ordering σ of $V(G)$, a pair of non-incident edges is *separated* by σ if the vertices of the two edges do not alternate. The *circular separation dimension* $\pi^\circ(G)$ of a graph G is the minimum size of a set of circular vertex orderings needed to separate every pair of non-incident edges of G.

We show that $\pi^\circ(G) = 1$ if and only if G is an outerplanar graph. While $\pi(G)$ is unbounded for bipartite graphs, we prove $\pi^\circ(G) \leq 2$ for every bipartite graph. Finally, we prove that π° is unbounded by showing that $\pi^\circ(K_n) \geq \log_2 \log_3(n-1)$. (Received September 19, 2016)