1135-05-2806   **Caroline Daugherty**, **Josh Laison**, **Rebecca Robinson** and **Kyle Salois***,
kjsalois@willamette.edu. *Intersection Graphs of Maximal Convex Sub-Polygons of k-Lizards.* Preliminary report.

A *k-lizard* is a simply connected polygon with sides parallel to a regular $2k$-gon. For a k-lizard P, let S be the set of all maximal sub-polygons contained in P. A graph G is a *k-maximal sub-polygon graph* (or *k-MSP graph*) if there exists a k-lizard P and a one-to-one correspondence between vertices of G and polygons in S such that two vertices are adjacent in G if and only if their corresponding polygons in S intersect. We find separating examples of graphs that are k-MSP graphs but not j-MSP graphs for $j \neq k$. (Received September 26, 2017)