1163-57-509 Ramin Naimi, Occidental College, Los Angeles, CA 90041, Andrei Pavelescu, University of South Alabama, Mobile, AL 36688, and Elena Pavelescu*, University of South Alabama, Mobile, AL 36688. Bounds for maximal linkless graphs.

A linklessly embeddable graph G is maxnil if it is not a proper subgraph of a linklessly embeddable graph of the same order. The property of being maxnil is, in a way, analogous to the property of being maximal planar. While it is well known that every maximal planar graph with n vertices has 3n - 6 edges, an analogous statement for maxnil graphs does not exist. In this talk we discuss properties of maxnil graphs, and we present two new families of maximal linklessly embeddable graphs on n vertices: one family with 3n - 5 edges for all $n \ge 10$, and another family with n vertices and $m < \frac{25n}{12}$ edges for all $n \ge 13$. (Received September 08, 2020)