

1014-05-631

Michael O. Albertson* (albertson@math.smith.edu), Department of Mathematics, Smith College, Northampton, MA 01063. *Locally Planar Graphs*. Preliminary report.

If G is a graph embedded on a surface, then the length of a shortest non-contractible cycle in G , is called its *width*. In this context G is said to be *locally planar* if its width is large enough. Locally planar graphs embedded on a surface have properties that mimic those of planar graphs. For example, if G is locally planar, then G can be 5-colored. This talk will discuss definitions of local planarity in other contexts and the extent to which there are results analogous to those for embedded graphs. (Received September 21, 2005)