1046-05-159 Lynnette Snyder* (lynnette.snyder@simpson.edu). The Relaxed Coloring Game on Certain Classes of Trees. Preliminary report.

We consider the (r, d)-relaxed coloring game on different classes of graphs. Two players, Alice and Bob, color the vertices of a graph G with r colors. Alice has the first move. A color α is legal for a vertex x if x has at most d neighbors colored α , and if w, a neighbor of x colored α , has at most d-1 neighbors colored α . Alice wins if every vertex is colored, while Bob wins if at some point an uncolored vertex has no legal color. We show that Alice has a winning strategy in the (2,1)-coloring game on stars and extensions of stars. (Received August 07, 2008)