

1154-VP-2551 **Jackson Autry***, jautry@math.tamu.edu, and **Christopher O’Neill**. *Sequentially Embeddable Graphs*.

We call a (not necessarily planar) embedding of a graph G in the plane *sequential* if its vertices lie in \mathbb{Z}^2 and the line segments between adjacent vertices contain no interior integer points. We prove (i) a graph G has a sequential embedding if and only if G is 4-colorable, and (ii) if G is planar, then G has a sequential planar embedding. (Received September 17, 2019)