

1011-20-125

**Lucas A Sabalka\*** (sabalka@math.uiuc.edu), Department of Mathematics, U. of Illinois at Urbana-Champaign, Champaign, IL 61820. *Embeddings of right-angled Artin groups into graph braid groups.*

We construct an embedding of any right-angled Artin group  $G(\Delta)$  defined by a graph  $\Delta$  into a graph braid group. The number of strands required for the braid group is equal to the chromatic number of  $\Delta$ . This construction yields an example of a hyperbolic surface subgroup embedded in a two strand planar graph braid group. (Received August 22, 2005)