

1125-AE-2346 **Robert W Bell*** (rbell@math.msu.edu), Department of Mathematics, 619 Red Cedar Road,
Room C305, East Lansing, MI 48824. *An exploration of right-angled Artin groups.*

Suppose that we are given elements a, b, c, \dots, z and their inverses. Suppose that some of these letters commute; for instance this can be recorded by a graph with vertices a, b, c, \dots, z and edges xy whenever x and y commute. Such a graph defines a graph group; this group is more commonly referred to as a right-angled Artin group because of connections to reflections in mirrors which meet at right angles and because of their similarity to the braid groups studied by Emil Artin. These groups play a surprisingly important role in the study of geometric group theory. This talk will serve as an introduction and an invitation to research problems on graph groups. (Received September 20, 2016)