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P.O. Box 9110, Waltham, MA 02454, and **John Crisp** and **Karen Vogtmann**. *Automorphisms  
of right-angled Artin groups of dimension 2*.

Right-angled Artin groups are finitely generated groups whose only relations are commutator relations between pairs of generators. This class of groups may be thought of as interpolating between free groups (no generators commute) and free abelian groups (all generators commute). Thus, automorphisms of these groups interpolate between  $\text{Aut}(F_n)$  and  $\text{GL}(n, \mathbb{Z})$ . We begin a study of automorphism groups of right-angled Artin groups in the case where the defining graph of the Artin group  $A$  has no triangles (the "2-dimensional" case). We prove some algebraic facts about  $\text{Aut}(A)$  and construct a candidate "outer space" by considering actions of  $A$  on 2-dimensional CAT(0) complexes. (Received August 15, 2005)