1096-20-811 **Nic Koban*** (nicholas.koban@maine.edu). *The Bieri-Neumann-Strebel Invariant of the Pure Symmetric Automorphisms of a Right-angled Artin Group.*

In 1987, Bieri, Neumann, and Strebel introduced the geometric invariant $\Sigma^1(G)$ for a discrete group G. It is an open subset of a sphere associated to G known as the character sphere $S(G)$. Although $\Sigma^1(G)$ has proven quite difficult to compute in general, it has been computed in the case that G is the pure symmetric automorphism group of a free group. This is the group of basis conjugating automorphisms of a free group. In this talk, we generalize this result by computing $\Sigma^1(G)$ when G is the pure symmetric automorphism group of a right-angled Artin group. We also provide an application of this computation. It was shown that if A is the right-angled Artin group determined by a graph that has no separating intersection of links (no SILs), then the corresponding group of pure symmetric automorphisms is itself a right-angled Artin group. We use our calculation of Σ^1 of the pure symmetric automorphism group to prove the converse of this statement. (Received September 10, 2013)