

1102-05-209

**Aba Mbirika\*** (mbirika@uwec.edu), **Thomas Pietraho** and **William Silver**. *A Robinson-Schensted correspondence on complex reflection groups  $G(r,p,n)$ .*

The classical Robinson-Schensted algorithm establishes a bijection between permutations in the symmetric group  $\mathfrak{S}_n$  and ordered pairs of same-shape standard Young tableaux of size  $n$ . This map has proven particularly well-suited to certain questions in the representation theory of both  $\mathfrak{S}_n$  and the semisimple Lie groups of type  $A$ . For instance, Kazhdan-Lusztig cells as well as the primitive spectra of semisimple Lie algebras can be readily described in terms of images of this correspondence.

Other sometimes more elementary representation-theoretic information requires more work to extract from standard Young tableaux. For instance, in independent work, Reifegerste and Sjöstrand developed a method for reading the value of the sign representation of a permutation in  $\mathfrak{S}_n$ . In this talk, we extend this result to the imprimitive complex reflection groups  $G(r, p, n)$  via a generalized Robinson-Schensted algorithm. (Received July 29, 2014)