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*Probabilistic interpretations of quasisymmetric functions*

We explore extensions of Stanley's work on applications of quasisymmetric functions to generalized riffle shuffling. Results include a probabilistic interpretation of the quasisymmetric Schur functions of Haglund, Luoto, Mason, and van Willigenburg in terms of Schensted insertion for composition tableaux, as well as similar such interpretations in the setting of colored quasisymmetric functions. We also extend previous work with Hersh to show that characters on the Hopf algebra of colored quasisymmetric functions induce Markov chains on descent classes of wreath products.