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Edward Allen, Josh Hallam and Sarah Mason*, masonsk@wfu.edu. *Dual immaculate quasisymmetric functions expand positively into quasisymmetric Schur functions.*

We discuss the connection between two recently introduced bases for quasisymmetric functions, both of which are natural quasisymmetric analogs of Schur functions due to the combinatorial properties they exhibit. The quasisymmetric Schur functions are obtained through specializations of Macdonald polynomials. The dual immaculate basis is dual to a basis for non-commutative symmetric functions constructed through non-commutative Berenstein creation operators. Both bases can be defined using tableaux-like objects. We describe a Remmel-Whitney-style algorithm for writing a dual immaculate quasisymmetric function as a positive sum of quasisymmetric Schur functions. We also explore properties of the insertion algorithm used to prove this decomposition. (Received February 06, 2018)