Sarah K Mason* (masonsk@wfu.edu), Winston Salem, NC 27106, and Jeffrey Remmel. The omega involution on quasisymmetric functions.

The classical omega involution on symmetric functions sends a Schur function indexed by a partition to the Schur function indexed by the conjugate partition. A refinement of this involution to quasisymmetric functions is defined on certain quasisymmetric function bases by Ehrenborg and Malvenuto-Reutenauer. We describe this involution on the quasisymmetric Schur function basis and use this to obtain skew quasisymmetric Schur functions. (Received February 13, 2011)