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Eric S. Egge and **Nicholas A. Loehr*** (nloehr@vt.edu), Va. Tech. Dept. of Mathematics, 460 McBryde Hall, Blacksburg, VA 24061-0123, and **Gregory S. Warrington**. *A Modified Inverse Kostka Matrix.*

The inverse Kostka matrix is the transition matrix that converts monomial expansions of symmetric functions to Schur expansions. Eggecioglu and Remmel gave a combinatorial description of the entries in this matrix using signed special rim-hook tableaux. We will describe a modified version of this matrix that converts fundamental quasisymmetric expansions of symmetric functions into Schur expansions. Such conversions are useful, for instance, in the theory of Macdonald polynomials and LLT polynomials. This work provides a linear-algebraic complement to a recent combinatorial construction of Sami Assaf. (Received February 12, 2010)