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Sankaran Viswanath* (svis@math.ucdavis.edu), Dept. of mathematics, University of California, One Shields Avenue, Davis, CA 95616. *Kostka-Foulkes polynomials for symmetrizable Kac-Moody algebras.*

We consider a natural generalization of the classical Hall-Littlewood and Kostka-Foulkes polynomials to symmetrizable Kac-Moody algebras \mathfrak{g} . We'll show that the Kostka-Foulkes polynomials in this setting coincide with Lusztig's t -analog of weight multiplicities for \mathfrak{g} , thereby generalizing the classical theorem due to Kato. For \mathfrak{g} an affine Kac-Moody algebra, we'll study the Kostka-Foulkes polynomials associated to the basic representation and formulate some explicit product formulas for the t -analog of the string function. (Received September 08, 2006)