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**Julie Beier\*** ([beier\\_jc@mercer.edu](mailto:beier_jc@mercer.edu)), Mercer University, Department of Mathematics, 1400 Coleman Avenue, Macon, GA 31201. *Weights and Combinatorics Appearing in Certain Demazure Crystals.*

Crystal bases provide a useful tool for studying the combinatorics of integrable representations of quantum affine algebras. The integrable modules contain certain important subspaces called Demazure modules. We look specifically at the quantum affine algebra  $U_q(\widehat{sl}(n))$ . The crystal bases for integrable modules of this quantum group can be realized in terms of combinatorial objects called extended Young diagrams. Previously, we used this representation to give an explicit realization of a certain class of Demazure crystals. Here we give this explicit realization, calculate the weights of the elements in this family of Demazure crystals and show the correspondence between the weights and the extended Young diagrams. (Received September 20, 2011)