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Julie C Beier* (jcbeier@unity.ncsu.edu), North Carolina State University, Box 8205,
Raleigh, NC 27695. *Combinatorics of Crystal Bases for Certain Demazure Modules.*

Crystal bases provide a useful tool for studying the combinatorics of integrable representations of quantum affine algebras. Demazure modules are an important class of finite dimensional subspaces of these integrable modules. The realizations of the crystal bases for integrable modules of the quantum affine algebra $U_q(\widehat{\mathfrak{sl}}(n))$ in terms of certain combinatorial objects called extended Young diagrams is already known. Here we utilize this information and the definition of Demazure crystals to give concrete realizations of a certain family of Demazure modules for the quantum affine algebra $U_q(\widehat{\mathfrak{sl}}(n))$ in terms of extended Young diagrams. (Received September 21, 2007)