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**Maggie Rahmoeller\*** (rahmoeller@roanoke.edu), Salem, VA 24153. *Using Path Realization to Show the Tensor Product-Like Structure of Certain  $U_q(\widehat{\mathfrak{sl}}(n))$  - Demazure Crystals.*

In 1991, Kang, Kashiwara, Misra, Miwa, Nakashima, and Nakayashiki gave the path realizations of affine crystals as a semi-infinite tensor product of some finite crystals called perfect crystals. The crystal for a Demazure module of the quantum affine algebra  $U_q(\widehat{\mathfrak{sl}}(n))$  is called a Demazure crystal. A Demazure crystal is a suitable subset of the crystal for the associated integrable module of  $U_q(\widehat{\mathfrak{sl}}(n))$ . Using the path realization of these Demazure crystals, we show that, for a fixed sequence of Weyl group elements, certain  $U_q(\widehat{\mathfrak{sl}}(n))$ - Demazure crystals have tensor product-like structure. (Received January 27, 2019)