1022-05-21 Ghislain Fourier and Anne Schilling*, Department of Mathematics, University of California, Davis, CA 95616, and Mark Shimozono. Demazure structure inside Kirillov-Reshetikhin crystals.

The conjecturally perfect Kirillov-Reshetikhin (KR) crystals are known to be isomorphic as classical crystals to certain Demazure subcrystals of crystal graphs of irreducible highest weight modules over affine algebras. Under some assumptions we show that the classical isomorphism from the Demazure crystal to the KR crystal, sends zero arrows to zero arrows. This implies that the affine crystal structure on these KR crystals is unique. (Received August 22, 2006)