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University, Raleigh, NC 27695-8205, and **Rebecca L. Jayne**. *On Demazure crystals for $U_q(G_2^{(1)})$.*

We consider the quantum affine algebra $U_q(G_2^{(1)})$ and its irreducible level l modules $V(l\Lambda_0)$ and $V(l\Lambda_2)$. The associated crystals $B(l\Lambda_0)$ and $B(l\Lambda_2)$ can be realized as certain sequences (paths) in the semi-infinite tensor product of the level l perfect crystal $B = B^{1,l}$. Let W be the Weyl group and for $w \in W$, let $V_w(l\Lambda_0)$ and $V_w(l\Lambda_2)$ be the corresponding Demazure modules. The associated crystals $B_w(l\Lambda_0)$ and $B_w(l\Lambda_2)$ are certain subsets of the crystals $B(l\Lambda_0)$ and $B(l\Lambda_2)$ respectively. We show that there exist suitable sequences $\{w^{(k)}\}_{k \geq 0}$ and $\{w'^{(k)}\}_{k \geq 0}$ of Weyl group elements such that the Demazure crystals $B_{w^{(k)}}(l\Lambda_0)$ and $B_{w'^{(k)}}(l\Lambda_2)$ have tensor product like structures. (Received June 17, 2011)