

A new realization of crystal graphs for $A_1^{(1)}$

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Joint work with Seokjin Kang

We introduce new combinatorics of Young walls for the quantum affine algebra $U_q(\hat{sl}_2)$ associated with the level 1 perfect crystal $B = B(0) \sqcup B(\theta)$. Using these Young walls, we construct a new realization of level 1 irreducible highest weight crystals for $U_q(\hat{sl}_2)$.

1 Presented by Author 1