

Workshop on Representation Theory, Geometry & Combinatorics

Organizer: Mark Haiman

Monday June 2–Friday June 6, 9:30–5:00pm, Bechtel 120ABC

Anne Schilling, UC Davis

Existence of Kirillov-Reshetikhin crystals for nonexceptional types

Using the methods of Kang *et al.* and recent results on the characters of Kirillov-Reshetikhin modules by Nakajima and Hernandez, the existence of Kirillov-Reshetikhin crystals $B^{r,s}$ is established for all nonexceptional affine types. We also prove that the crystals $B^{r,s}$ of type $B_n^{(1)}$, $D_n^{(1)}$, and $A_{2n-1}^{(2)}$ are isomorphic to recently constructed combinatorial crystals for r not a spin node.

This talk is based on joint work with Masato Okado <http://front.math.ucdavis.edu/0706.2224>