



Algebra/Topology Seminar

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CRYSTALS OF TABLEAUX AND T-DEFORMATION OF CHARACTERS

Thursday, September 13, 2012

1:15 p.m. in ES-143

ABSTRACT. A combinatorial description of the crystal $\mathcal{B}(\infty)$ for finite-dimensional simple Lie algebras in terms of certain Young tableaux was developed by J. Hong and H. Lee. We establish an explicit bijection between these Young tableaux and canonical bases indexed by Lusztig's parametrization, and obtain a combinatorial rule for expressing the product side of the Gindikin-Karpelevich formula, which is a t -deformation of the character of $\mathcal{B}(\infty)$, as a sum over this set of Young tableaux. This is joint work with K.-H. Lee.