

Math/Phys seminar

Keshav Dahiya, IU Indianapolis

Where/when: Tuesdays Oct 21, 1:30-2:30 pm, SC G060

Title: R-matrices for vector representations of quantum affine algebras.

Abstract: In this talk, I will discuss a method for finding explicit expressions of R-matrices acting in representations of quantum affine algebras. The method relies on q-characters and some useful properties of the R-matrices. I will illustrate the method for vector representations of some quantum affine algebras, in particular, for $U_q(\mathfrak{g}_{2^{(1)}})$ and $U_q(\mathfrak{d}_{4^{(3)}})$. The answer is written in terms of projectors related to the decomposition of the tensor squares with respect to non-affine quantum algebras.