SACHIN GAUTAM, The Ohio State University *Lattice operators of quantum affine algebras*

Let g be a finite-dimensional, simple Lie algebra over the field of complex numbers, and U be the quantum, untwisted affine algebra, associated to g. It is well known that the affine braid group of g acts on any integrable representation of U. In particular, one obtains an action of the coroot lattice of g on such a representation. In this talk, I will present an explicit formula for these lattice operators on finite-dimensional representations of U, in terms of the generators of its maximal commutative subalgebra in Drinfeld's loop presentation. This formula was obtained in a joint work in progress with V. Toledano Laredo.