

1083-17-159

Naihuan Jing* (jing@math.ncsu.edu), Raleigh, NC 27695. *Principal Realizations of the Yangian $Y(sl(n))$.*

I will discuss the new realization for Yangians of the general linear types and their twisted analogs (jointly with C. Bai, M.-L. Ge and M. Liu). In recent applications of Yangians to quantum computations, the Bell states are found to be suitable in the Yangian representations. We will generalize this notion and prove that the principal basis indeed simply the Yangian action. (Received August 26, 2012)