

1048-16-17

Vladislav Kharchenko* (vlad@servidor.unam.mx), Papagayo #4, Col. Lago de Guadalupe, 54760 Cuautitlan, Mexico. *Right coideal subalgebras for quantum groups of type B_n* . Preliminary report.

We give a complete classification of right coideal subalgebras which contain all group-like elements for the quantum group $U_q^+(\mathfrak{so}_{2n+1})$ provided that q is not a root of 1. If q has a finite multiplicative order $t > 4$, this classification remains valid for homogeneous right coideal subalgebras of the small Lusztig quantum group $u_q^+(\mathfrak{so}_{2n+1})$. As a consequence, we determine that the total number of right coideal subalgebras which contain the coradical equals $(2n)!!$, the order of the Weyl group defined by the root system of type B_n . (Received November 27, 2008)