

POINTED HOPF ALGEBRAS WITH STANDARD BRAIDING ARE GENERATED IN DEGREE ONE

ANGIONO, IVÁN; GARCÍA IGLESIAS, AGUSTÍN

ABSTRACT. We show that any finite-dimensional pointed Hopf algebra over an abelian group Γ such that its infinitesimal braiding is of standard type is generated by group-like and skew-primitive elements. This fact agrees with a long-standing conjecture by Andruskiewitsch and Schneider. We also show that the quantum Serre relations hold in any coradically graded pointed Hopf algebra over Γ of finite dimension and determine how these relations are lifted in the standard case.

FAMAF-CIEM (CONICET), UNIVERSIDAD NACIONAL DE CÓRDOBA, MEDINA ALLENDE S/N, CIUDAD UNIVERSITARIA, 5000 CÓRDOBA, REPÚBLICA ARGENTINA.

E-mail address: (angiono|aigarcia)@mate.uncor.edu

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