

1067-16-422

Miriam Cohen* (mia@cs.bgu.ac.il), Department of mathematics, Ben Gurion University, 84105 Beer Sheva, Israel, and **Sara Westreich** (swestric@mail.biu.ac.il), Department of Management, Bar Ilan University, 52900 Ramat Gan, Israel. *Conjugacy classes for Hopf algebras.*

An important instance of structure constants exists for finite groups and the way their class sums multiply this is connected to the associated character table.

We shall discuss the meaning of these concepts from the point of view of Hopf algebras and their duals and thus give a generalization of conjugacy classes and class sums for semisimple Hopf algebras H having a commutative character ring (quasitriangular Hopf algebras have this property) and a formula for their associated structure constants. When H is also factorizable these constants turn out to equal the fusion rules up to rational scalar multiples.

We also show a connection between the conjugacy classes and the commutator subspace of H . This connection boils down to a known connection for finite group algebras. (Received September 02, 2010)