1039-16-111 Apoorva Khare\* (apoorva@math.ucr.edu), Department of Mathematics, 900, University Avenue, Riverside, CA 92521. The sum of a finite group of weights of a Hopf algebra.

We present Hopf-theoretic analogues of the orthogonality relations for characters of finite groups. More precisely, we evaluate the sum of any finite group of weights of a Hopf algebra, at products of grouplike and skew-primitive elements. (Received March 09, 2008)