1090-20-200 **Angela L. Antonou*** (angela@math.niu.edu), Department of Mathematical Sciences, Northern Illinois University, DeKalb, IL 60115. *A characterization of commutative standard table algebras with at most one nontrivial multiplicity.* Preliminary report.

We study commutative standard table algebras with at most one nontrivial multiplicity. All multiplicities are trivial if and only if the table algebra is an abelian group algebra. The main result shows that there exists exactly one nontrivial multiplicity if and only if the table basis is the wreath product of a two-dimensional subalgebra and an abelian group. The theorem applies to adjacency algebras of commutative association schemes with exactly one primitive idempotent matrix of rank greater than one. A theorem of Seitz that characterizes finite groups with exactly one irreducible representation of degree greater than one is another corollary of the main theorem. (Received March 01, 2013)