Harvey I. Blau* (hblau@niu.edu), Department of Mathematical Sciences, Northern Illinois University, DeKalb, IL 60115. Control of Fusion in Table Algebras. Preliminary report.

There is a deep and well-known theory of fusion (conjugation) of subsets of a finite group, with respect to certain subgroups associated with a fixed prime $p$. We investigate the extent to which some aspects of this theory generalize to $p$-valenced standard integral table algebras, and in particular to adjacency algebras of $p$-valenced association schemes. (Received August 10, 2015)