962-20-204   **Michael E Orrison*** (`michael.orrison@dartmouth.edu`). *Computing Isotypic Projections for Finite Groups.* Preliminary report.

Spectral analysis on a finite group G involves computing projections of functions defined on homogeneous spaces of G onto invariant subspaces. In this talk, we discuss an approach to computing projections onto invariant subspaces known as isotypic subspaces. The approach uses class sums to view isotypic projections as eigensapce projections which allows us to take advantage of efficient eigenspace projection techniques. (Received August 27, 2000)