Scott Andrews and Nathaniel Thiem* (thiemn@colorado.edu). Supercharacters and the combinatorics of GGG representations. Preliminary report.

Kawanaka introduced the generalized Gelfand—Graev representations to find the cuspidal (aka. hard to find) representations of finite groups of Lie type. Their remarkably technical construction has led to a relative dearth of results about their structure. This talk examines the case of finite general linear groups; here, using basic supercharacter theoretic techniques we not only simplify their definition, but also recover a beautiful underlying combinatorics for these representations built on Kostka—Foulkes polynomials. The ultimate goal of this approach is to use these methods to expand this program to general type. (Received February 20, 2015)