1035-11-379　　　　　**Daniel Bump**, Department of Mathematics, Stanford University, Stanford, CA 94305, **Ben Brubaker**, Department of Mathematics, M.I.T., Cambridge, MA 02139, and **Solomon Friedberg*** (`friedber@bc.edu`), Department of Mathematics, Boston College, Chestnut Hill, MA 02467. *Metaplectic Eisenstein series and Gelfand-Tsetlin patterns.* Preliminary report.

In this talk I report on work linking the Whittaker coefficients of metaplectic Eisenstein series to multiple Dirichlet series whose coefficients are sums of products of Gauss sums described via Gelfand-Tsetlin patterns. Since Whittaker models on the metaplectic covers of $GL(r)$ are not unique, the standard approach of Shintani and Casselman-Shalika to describe these Whittaker coefficients does not apply. However, there is a surprising description that may be thought of as a deformation of a formula of Tokuyama, a deformation involving quantities that also appear in the theory of quantum groups. We investigate the interplay between this description and the functional equations of the resulting multiple Dirichlet series. (Received September 05, 2007)