

1014-11-1287 **Mark Budden*** (buddenma@mail.armstrong.edu), Armstrong Atlantic State University, 11935 Abercorn St., Department of Mathematics, Savannah, GA 31419. *Local Coefficient Matrices and Shimura's Correspondence*. Preliminary report.

In 1973, Shimura described a correspondence relating modular forms of half-integral weight to those with even integral weight. This correspondence was reformulated by Gelbart and Piatetski-Shapiro in terms of the representation theory of 2-fold metaplectic coverings of GL_2 . Flicker further generalized Shimura's correspondence to n -fold metaplectic coverings of GL_2 . In this talk, a generalized local Shimura correspondence will be described for n -fold coverings of GL_r in the case of the unramified principal series. This correspondence is obtained via "local coefficient matrices", defined in terms of the action of the standard intertwining operators on a canonical basis of the space of Whittaker functionals. (Received September 27, 2005)