1060-11-180   **Ralf Schmidt*** (`rschmidt@math.ou.edu`), Department of Mathematics, University of Oklahoma, Norman, OK 73019-0315. *Local newforms for the metaplectic group.*

The connection between elliptic modular forms and automorphic representations of the group GL(2) is well understood. A similar connection exists between modular forms of half-integral weight and automorphic representations of the metaplectic group (double cover of SL(2)). The connection in the half-integral weight case is less clear, partly due to the fact that p-adic representations of the metaplectic group do not admit a simple theory of local newforms as in the GL(2) case. We will present a newform theory for the metaplectic group in which the number of local newforms is related to the number of Whittaker models of a representation. This is joint work with Brooks Roberts. (Received March 29, 2010)