ABSTRACT. We prove, using a technique developed for $GL(n)$ in Howe and Moy [H], a bijection between generalized Hecke algebras of $G = SL(2, F)$ over a p-adic field and those of its n-fold metaplectic cover $\overline{G}$. This result implies that there is a canonical correspondence between irreducible admissible representations of G and genuine irreducible admissible representations of $\overline{G}$ of "sufficiently large level" (depending on n, p).

[H] R. Howe (with the collaboration of A. Moy), *Harish-Chandra homomorphisms for p-adic groups*, CBMS Regional Conference Series in Mathematics, No. 59, Amer. Math. Soc., Providence, 1985, MR 87h:22023