

1125-11-3012

**Malcolm Edward Rupert\*** (mrupert@uidaho.edu). *An explicit theta lift from Hilbert modular forms to Siegel paramodular forms.*

Let  $E/\mathbb{Q}$  be a real quadratic extension for which 2 is unramified and let  $\pi_0$  be an irreducible, cuspidal automorphic representation of  $\mathrm{gl}(2, \mathbb{A}_E)$ . I provide a formula, locally at every prime, for an explicit theta lift which produces a Siegel paramodular newform from the data of  $\pi_0$ . After showing the connection to curves by modularity results, I will outline the steps necessary to produce this formula and sketch a proof that a given test vector satisfies the required invariance properties to produce a nonzero Siegel paramodular newform. (Received September 20, 2016)