

1096-11-967

Yueke Hu* (yhu@math.wisc.edu). *Cuspidal part of an Eisenstein series restricted to an index 2 subfield.*

Let E be a quadratic extension of a number field F . Let $E(g, s)$ be an Eisenstein series on $GL_2(E)$, and let f be a cuspidal automorphic form on $GL_2(F)$. We will consider in this talk the following automorphic integral:

$$\int_{Z_A GL_2(F) \backslash GL_2(A_F)} f(g) E(g, s) dg.$$

This is in some sense the compliment case to the well-known Rankin-Selberg integral and the triple product formula. We will approach this integral by Waldspurger's formula. We will see when the integral is automatically zero, and otherwise the L-function it represents. We will also show some local results at ramified places, where the level of the ramification can be arbitrarily large. (Received September 11, 2013)