## 1069-11-284 **luanlei zhao\*** (zhao@math.wisc.edu), 503 eagle heights apt H, madison, WI 53705. Integrals of automorphic Green functions.

Following S. Kudla, J. Bruinier and T. Yang, we compute the integral of an automorphic Green functions coming from vector valued harmonic Maass forms for the dual pair (O(n), Sp(1)) over the negative 2-planes with signture (r,2) for  $0 \le r \le n$ , which is of interest in Arakelov geometry. Specially, we generalize their results in different respects. If time permits, we will talk about some examples. (Received January 24, 2011)