**Meeting:** 1004, Bowling Green, Kentucky, SS 9A, Special Session on L-Functions

1004-11-215 **Cetin Urtis*** (urtis@math.arizona.edu), Department of Mathematics, University of Arizona, Tucson, AZ 85721. *The Siegel-Weil formula, L-functions, and arithmeticity of cuspforms on Hermitian orthogonal groups.*

In this talk we give a simple proof of the Siegel-Weil formula for the pair of quaternion groups $O^*(4n), Sp^*(m,0)$ in the convergent range. As an application of the Siegel-Weil formula and the decomposition formula for Eisenstein series we obtain algebraicity results: special values of $L$-functions on hermitian orthogonal groups, a basis for the space of cuspforms with algebraic Fourier coefficients and the theta series span the space of cuspforms on hermitian orthogonal groups. (Received January 25, 2005)