

November 13, 2013: *Fourier Coefficients and Certain Periods of Cuspidal Automorphic Forms—Local Aspect*

In this talk, we will discuss some relations between the top Fourier coefficients of automorphic representations and periods of cuspidal automorphic representations in the symmetric pair $(Sp(4n, F), Sp(2n, E))$ case. In particular, over non-archimedean places, we proved that this symmetric pair is a Gelfand pair, and classified $Sp(2n, E)$ -distinguished tame supercuspidal representations in terms of Kim-Yu's constructions. Over the finite fields, we classified the distinguished unipotent representations in terms of Lusztig's classification. Furthermore, we applied those classifications to study the wavefront set of the distinguished representations.