Speaker: Jayce Getz

Title: Summation formulae and speculations on L-functions attached to triples of automorphic representations

Abstract: Braverman and Kazhdan have conjectured the existence of summation formulae that are essentially equivalent to the analytic continuation and functional equation of Langlands L-functions in great generality. Motivated by their conjectures and related conjectures of L. Lafforgue, Ngo, and Sakellaridis, Baiying Liu and I have proven a summation formula analogous to the Poisson summation formula for the subscheme cut out of three quadratic spaces (V_i, Q_i) of even dimension by the equation

$$Q_1(v_1) = Q_2(v_2) = Q_3(V_3).$$

I will sketch the proof of this formula in the first portion of the talk. In the second portion, time permitting, I will discuss how these summation formulae lead to functional equations for period integrals of automorphic representations of

$$GL_{n_1} \times GL_{n_2} \times GL_{n_3}$$

where the n_i are arbitrary, and speculate on the relationship between these period integrals and Langlands L functions.