

Speaker: Simon Marshall

Title: The asymptotic behavior of periods of automorphic forms

Abstract: If f is an automorphic form on a group G , the integral of f over the adelic points of a subgroup of G is known as a period of f . I will describe how period integrals can give us useful information about the cohomology or harmonic analysis of arithmetic manifolds, and present results on the asymptotics of certain periods that can be interpreted as upper and lower bounds for the sup norms of Maass forms. I will discuss the links between these results and topics such as theta lifting, special L-values, trace formulae, and the work of Sakellaridis and Venkatesh on the spectra of spherical varieties. Part of this is joint work with Farrell Brumley.