Abstract:

Let G be a reductive group defined and deployed over a global function field. We are interested in the sum of multiplicities of irreducible representations containing a regular depth zero representation of G(O), where O is the ring of integral adeles, in the automorphic cuspidal spectrum. The sum is given in terms of the number of F_q-points of Hitchin moduli spaces of groups associated to G. When G=GL(n), it implies some cases of a conjecture of Deligne by Langlands correspondence. In this talk, I will mainly focus on the case of GL(n).