Séminaire de théorie des nombres

Le 23 juin 2008 à 14h

Spectrum of spherical varieties

Exposé de Akshay Venkatesh (Courant Institute)

Résumé : Let G be a reductive group. A homogeneous G-variety $X = G/H$ is said to be spherical if a Borel subgroup of G acts with an open orbit on X.

I'll discuss harmonic analysis on spherical varieties over p-adic fields (joint work with Yiannis Sakellaridis, although I will also review results that are solely due to Sakellaridis). For example : how does the action of $G(Q_p)$ on $L^2(X(Q_p))$ decompose ? The main motivation is to better understand H-periods of automorphic forms on G. I will describe an application to a conjecture of Ichino and Ikeda concerning nonvanishing of integrals of matrix coefficients.