Séminaire de théorie des nombres Le 22 septembre 2008 à 14h

Non-vanishing of L-functions of half-integral weight

Exposé de B. Ramakrishnan (Harish-Chandra Research Institute)

Résumé: In this talk we report about our joint work with V. Kumar Murty and M. Manickam on the twisted averages of L-functions of integral and half integral weight modular forms. We show that given a half integral weight form f of weight k+1/2, for sufficiently large primes l, a positive proportion of twists $L(f,\chi,k/2+1/4)$ by characters χ mod l are non zero. This is not known in the case of integral weight forms.