Séminaire de théorie des nombres

Le 18 octobre à 14h

The two variable generating function of Hecke L-values of CM elliptic curves

Exposé de Shinichi Kobayashi

Résumé : Generating functions are important to construct p-adic L-functions. Especially, at good supersingular primes for CM elliptic curves, it would be worthwhile to study the two variable generating function of Hecke L-values, since in this case the p-adic L-function of "two variable" has not yet constructed. In this talk I will give an algebraic characterization of the two variable generating function of Hecke L-values of CM elliptic curves as a theta function corresponding to a section of the Poincaré bundle. At good ordinary primes, I will show a simple construction of the two variable p-adic L-function using this characterization. At good supersingular primes, I will give a p-adic estimate of the denominators of the coefficients of the generating function.