Séminaire de théorie des nombres

Le 3 février 2003 à 14h15

Zeta elements and modular forms

Exposé de Tony Scholl

Résumé : Let f be a newform on $\Gamma_1(N)$ of weight $k \geq 2$. We show how to construct 'zeta elements', belonging to a suitable motivic cohomology group attached to the motive of f, which are related to special L-values in two ways : via the archimedean regulator map, to the (non-critical) L-values at $s = k$ of f and its twists ; and via the p-adic dual exponential map, to the (critical) values at $s = k - 1$. These generalise Kato's K_2 elements for $k = 2$.