

Séminaire de théorie des nombres

Le 11 mars 2013 à 14h (Jussieu)

The p -adic Gross-Zagier formula for elliptic curves at supersingular primes

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Résumé :

Let E be an elliptic curve defined over \mathbb{Q} and K an imaginary quadratic field satisfying the Heegner hypothesis. The p -adic Gross-Zagier formula for E is a formula relating the derivative of the L -function of E/K and the p -adic height of the Heegner point for K . For a good ordinary prime p , the formula is already obtained by B. Perrin-Riou long time ago. In this talk, we discuss the good supersingular case and explain ideas of proof.