Séminaire de théorie des nombres

Le 6 Mars à 14h

Iwasawa theoretic Gross-Zagier theorem

Exposé de Ben Howard

Résumé : Perrin-Riou has proved a p-adic form of the Gross-Zagier theorem, relating the p-adic height pairing of a Heegner point to the central derivative of the p-adic L-function of an elliptic curve. Mazur and Rubin have since given a conjectural generalization of this, in which the Heegner point is replaced by the inverse limit of Heegner points in an anticyclotomic tower, the p-adic height pairing is replaced by a pairing valued in the Iwasawa algebra, and the derivative of the p-adic L-function is replaced by the linear term of a two-variable p-adic L-function. I will sketch a proof of Mazur and Rubin's conjecture, and explain the connection with Perrin-Riou's Iwasawa main conjecture for Heegner points