- Name: Matteo Longo (University of Padova)

- Title : Anticyclotomic Iwasawa Main Conjectures for elliptic curves

- Abstract: Let E be an elliptic curve defined over the field of rational numbers, p a prime number, and K an imaginary quadratic field, of discriminant prime to the conductor of E, in which p is not ramified. Let K_∞ be the anticyclotomic p-adic extension of K. The anticyclotomic main conjecture relates, under suitable arithmetic conditions, a p-adic L-function (which is a p-adic anlytic object, related to the complex L-function of E twisted by anticylclotomic characters) and the structure of the Selmer group of E over K_∞ (viewed as a module over the Iwasawa algebra of K_∞/K). The formulation of the main conjecture depends on some arithmetic data: the behavior of p in K (split or inert) and the reduction type of E at p (good ordinary or supersingular). In a joint work, in progress, with M. Bertolini and R. Venerucci, for each of these situations we state and prove the corresponding version of the anticyclotomic Iwasawa main conjecture. I will try to explain some of the ideas underlying the proofs of these results.

- Date and place 12:00 on 12/03/2019 at Room 409.B of Omega building at UPc.

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