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Mirela Ciperiani*, The University of Texas at Austin, Austin, TX 78712. *The computation of anticyclotomic Λ -adic regulators of elliptic curves.*

Let E be an elliptic curve defined over \mathbb{Q} , K an imaginary quadratic field, and p a prime of good ordinary non-anomalous reduction. Set \mathcal{U} to be the inverse limit of the points of E defined over the layers of the anticyclotomic \mathbb{Z}_p -extension of K . The image of \mathcal{U} under the cyclotomic p -adic height pairing is generated by the anticyclotomic Λ -adic regulator. If K satisfies the Heegner hypothesis, the elliptic curve has analytic rank 1 over K , and the Heegner point defined over K is not divisible by p , then Heegner points generate \mathcal{U} .

In this talk, we will describe a method that allows us to compute anticyclotomic Λ -adic regulators. We generalize results of Cohen and Watkins, and thereby compute Heegner points defined over different layers of the anticyclotomic \mathbb{Z}_p -extension of K . We also prove a connection which gives rise to an efficient way of using results of Mazur-Stein-Tate to compute p -adic heights. This is joint work with Jennifer Balakrishnan and William Stein. (Received September 19, 2012)