

Séminaire de théorie des nombres

Le 19 novembre 2012 à 14h (Jussieu)

Torsion points on Jacobian varieties via Anderson's p-adic soliton theory.

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Résumé :

Anderson introduced a p-adic version of soliton theory. He applied it to the Jacobian variety of a cyclic quotient of a Fermat curve and showed that torsion points of certain prime order lay outside of the theta divisor. We evolve his theory further by using the Artin-Hasse exponential and Hasse-Witt matrix. As an application, we get stronger results on the intersection of the theta divisor and torsion points on the Jacobian variety of a more general class of curves. (Joint work with S. Kobayashi. Reference : arXiv :1210.5838.)