

Séminaire de théorie des nombres

Le 21 mars 2016 à 14h (PRG)

The p-part of the Birch and Swinnerton-Dyer Conjecture for Elliptic Curves of Analytic Rank One

Exposé de Dimitar Jetchev
(Ecole Polytechnique Fédérale de Lausanne)

Résumé :

I will explain the recent proof of the p-part of the Birch and Swinnerton-Dyer Conjectural formula for elliptic curves over \mathbb{Q} of analytic rank one. The proof is based on choosing a suitable parametrization of the elliptic curve with a Shimura curve, using Kolyvagin's Euler system method to get the upper bounds and an anticyclotomic Iwasawa main conjecture as well as a control theorem to get the lower bounds. This is joint work with Chris Skinner and Xin Wan.