Séminaire de théorie des nombres

Le 23 novembre 2009 à 14h

Diophantine geometry and Galois theory

Exposé de Minhyong Kim (University College London)

Résumé : In his manuscripts from the 1980's Grothendieck proposed ideas that have been interpreted variously as embedding the theory of schemes into either

– group theory and higher-dimensional generalizations ;
– or homotopy theory.

It was suggested, moreover, that such a framework would have profound implications for the study of Diophantine problems. In this talk, we will discuss mostly the little bit of progress made on this last point using some mildly non-abelian motives associated to hyperbolic curves.