Séminaire de théorie des nombres

Le 03 juin 2013 à 14h (Jussieu)

Norm forms as products of linear polynomials

Exposé de Lilian Matthiesen
(Orsay)

Résumé : I will discuss recent progress using additive combinatorics to prove the Hasse principle and weak approximation for certain varieties defined by systems of equations involving norm forms. This allows us to show that the Brauer-Manin obstruction controls weak approximation on normic bundles of the shape $N_K(x_1, ..., x_n) = P(t)$, where $P(t)$ is a product of linear polynomials all defined over $\mathbf{Q}$ and $K/\mathbf{Q}$ is an arbitrary extension of degree n.

This is joint work with Tim Browning.