



ID de Contribution: 44

Type: Non spécifié

## Counting points on algebraic varieties over the rational numbers

*jeudi 11 juillet 2019 15:00 (1 heure)*

For both conceptual and practical reasons it is useful to have estimates on the number of points of algebraic varieties over  $\mathbb{Q}$ , usually phrased in terms of asymptotics as the height of points increases. I will present a new such estimate, improving previous results by Bombieri, Pila, Heath-Brown, Browning, Salberger, Walsh and others. Time permitting, I will present an application to bounding the 2-torsion part of class groups of number fields.

This is joint work with Wouter Castryck, Raf Cluckers and Kien Huu Nguyen.

### Summary

**Orateur:** DITTMANN, Philip (KU Leuven)

**Classification de Session:** Arithmetic geometry and Galois theory