



Du
17
JUN.
2014

14h00
-
15h30

RÉGA

Benedict H. Gross "The arithmetic of hyperelliptic curves"

IHP
Salle 314

INSCRIPTION

Benedict H. Gross (Harvard University)
The arithmetic of hyperelliptic curves

Hyperelliptic curves first arose in the work of Abel, who generalized some of Euler's results on elliptic integrals. They were studied over the real and complex numbers by Legendre, Jacobi, and Riemann. I will review some of this material, then turn to the study of rational points on hyperelliptic curves over $\mathbb{Q}$. I will describe a beautiful recent result of B. Poonen and M. Stoll on curves with a rational Weierstrass point. I will also show that a positive proportion of hyperelliptic curves of a fixed genus $g \geq 2$ over $\mathbb{Q}$ have no points over any number field of odd degree, a result that is joint work with M. Bhargava and X. Wang.

URL of the page: <https://www.ihp.fr/fr/agenda/benedict-h-gross-arithmetic-hyperelliptic-curves>



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HORAIRES

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.