Du
10
OCT.
2012

14h00
-
15h30

RÉGA

Ariyan Javanpeykar "Arakelov theory and covers of curves"

IHP
Salle 314

INSCRIPTION

Ariyan Javanpeykar (Universiteit Leiden - Université Paris XI)
Arakelov theory and covers of curves

Let X be a curve over a number field. We study invariants of X such as the Belyi degree and the Faltings height. Our main result is an explicit inequality relating these invariants. As a first application, we deduce a conjecture of Edixhoven-de Jong-Schepers. Secondly, we give an algorithmic application. Finally, we give a Diophantine application: Szpiro's small points conjecture is true for hyperelliptic curves. We finish the talk with a short discussion of Edixhoven's strategy to compute etale cohomology in polynomial time and how the above results fit into this program.

URL of the page: https://www.ihp.fr/fr/agenda/ariyan-javanpeykar-arakelov-theory-and-covers-curves&is_pdf=true



INSTITUT HENRI POINCARÉ - UAR839

Sorbonne Université / CNRS
11 rue Pierre et Marie Curie
75231 Paris Cedex 05

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.

URL of the page: https://www.ihp.fr/fr/agenda/ariyan-javanpeykar-arakelov-theory-and-covers-curves&is_pdf=true