



Du  
**04**  
MARS.  
2020

14h00  
-  
15h00

## **RÉGA**

**Kęstutis Česnavičius - 14h00 - The Manin constant and the modular degree**

Jussieu  
15-25 502

### INSCRIPTION

Abstract: By the modularity theorem, an elliptic curve  $E$  over  $\mathbb{Q}$  of conductor  $N$  admits a surjection  $\phi$  from the modular curve  $X_0(N)$ . The Manin constant  $c$  of such a modular parametrization of  $E$  is the integer that scales the differential associated to the normalized newform on  $\Gamma_0(N)$  determined by the isogeny class of  $E$  to the  $\phi$ -pullback of a Néron differential of  $E$ . For optimal  $\phi$  Manin conjectured his constant to be 1, and we show that in general it divides  $\deg(\phi)$  under mild assumptions at the primes 2 and 3. This gives new restrictions on the primes that could divide the Manin constant. The talk is based on joint work with Michael Neururer and Abhishek Saha.

URL of the page: <https://www.ihp.fr/fr/agenda/kestutis-cesnavicius-14h00-manin-constant-and-modular-degree>



## **INSTITUT HENRI POINCARÉ - UAR839**

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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.