

Du  
**09**  
MARS.  
2022

15h45

-  
17h00

## RÉGA

**Alex Torzewski - 15h45 - Studying rational points via p-adic period mappings.**

INSCRIPTION

We outline a recent method of Lawrence-Venkatesh to study rational points on varieties via \$p\$-adic period mappings. More specifically, for varieties which come equipped with a family for which the fibres "vary sufficiently", by considering the variation of the cohomology of the fibres, one may show that the rational points must live in a proper subspace. In the case of smooth projective curves of genus  $> 1$ , such families exist and this yields a proof of the finiteness of their rational points, i.e. an alternative proof of the Mordell Conjecture.



## **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.