



Du  
**09**  
MARS.  
2022

14h45  
-  
16h00

### **RÉGA**

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

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  $g > 1$ , such families exist and this yields a proof of the finiteness of their rational points, i.e. an alternative proof of the Mordell Conjecture.



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**HORAIRES**

Lundi au vendredi : 8h30 à 18h  
Fermé les jours fériés