

Department of Mathematics, BGU

AGNT

On Tuesday, January ,17 2023

At 12:40 – 13:40

In 666

Martin Lüdtkke, online meeting (Groningen)

will talk about

Non-abelian Chabauty for the thrice-punctured line and the Selmer section conjecture

Abstract: For a smooth projective hyperbolic curve Y/Q the set of rational points $Y(Q)$ is finite by Faltings' Theorem. Grothendieck's section conjecture predicts that this set can be described via Galois sections of the étale fundamental group of Y . On the other hand, the non-abelian Chabauty method produces p -adic analytic functions which conjecturally cut out $Y(Q)$ as a subset of $Y(Q_p)$. We relate the two conjectures and discuss the example of the thrice-punctured line, where non-abelian Chabauty is used to prove a local-to-global principle for the section conjecture.

Please Note the Unusual Place!