
BERN-FRIBOURG GRADUATE SEMINAR

a seminar for Master and PhD students

Thursday 7th May, 2026: 16:15 - 17:00

Room 2.52, Péroles 08, Fribourg

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Drawing lines to study curves, an introduction to the arithmetic of elliptic curves

Abstract

Some may know elliptic curves or abelian varieties simply as the complex tori that can be embedded into a projective space, but they are also a central object in the field of arithmetic geometry. The goal of this talk is to give an introduction to arithmetic geometry by focusing on elliptic curves and to give the main arithmetic theorems related to it. I will then try to give a hint at what I am particularly interested in, which is to understand the relation between degree and order of torsion points on elliptic curves/abelian varieties. The talk can be followed without prior knowledge in algebraic geometry or number theory.