

Séminaire de théorie des nombres

Le 28 janvier 2019 à 14h (Jussieu)

On uniformity conjectures for abelian varieties and K3 surfaces

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Résumé : There are several conjectures about K3 surfaces and abelian varieties of bounded dimension defined over number fields of bounded degree. They state that there are only finitely many possibilities for (1) the endomorphism algebra of an abelian variety, (2) the Neron-Severi lattice of a K3 surface, and (3) the Galois invariant subgroup of the geometric Brauer group. I will explain how these conjectures are related and what is known about them. This is a joint work with Martin Orr and Yuri Zarhin.