Oberseminar
Institut für Algebraische Geometrie

Domenico Valloni

(Leibniz Universität Hannover)

On the Shafarevich conjecture for isogenous K3 surfaces

Shafarevich conjectured that only finitely many lattices can appear as the Néron-Severi group of K3 surfaces that can be defined over number fields of bounded degree. This conjecture has important consequences for the arithmetic of K3 surfaces, e.g., it implies the uniform boundness of their Brauer groups, and it is known to hold in some particular cases, for example when restricted to K3 surfaces of maximal Picard rank (Shafarevich) or more generally to K3 surfaces with complex multiplication (Orr and Skorobogatov). In this talk we show how to attack the conjecture for another class of K3 surfaces, namely the isogeny class of a given K3 surface X, and to prove it in this case when the Picard rank of X is big.

Donnerstag, 28.01.2020

16:30 - 17:30

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Alle Interessierten sind herzlich eingeladen.