

# Non special varieties and potential density

*Thursday, 21 July 2022 11:30 (1 hour)*

We discuss the problem of finding a geometric characterization of varieties over number fields where the rational points are potentially dense (i.e. dense after a finite extension of the base field). In the spirit of Lang, there are two necessary conditions: there are no dominant maps to varieties of general type and no étale cover dominates a variety of general type. In joint work with E. Rousseau and J. Wang, we construct examples that show that such conditions are not sufficient for the function field and the hyperbolic analogues, thus giving evidence towards Campana's conjecture.

**Primary author:** TURCHET, Amos (Università degli Studi Roma 3)

**Presenter:** TURCHET, Amos (Università degli Studi Roma 3)