Séminaire de théorie des nombres

Le 26 avril 2021 à 14h (BigBlueButton)

Para-abelian varieties and Albanese maps

Exposé de Stefan Schröer (Düsseldorf)

Résumé : We construct for each proper algebraic space an Albanese map to a para-abelian variety, which is unique up to unique isomorphism. This holds unconditionally, in the absence of rational points or ample sheaves, and also for reducible or non-reduced spaces. It also works in families, at least over dense open sets of the base. In fact, the treatment of the relative setting is crucial, even to understand the situation over ground fields. This also ensures that Albanese maps are equivariant with respect to actions of group schemes. Our approach depends on the notion of families of para-abelian varieties, where each geometric fiber admits the structure of an abelian variety, and representability of tau-parts in relative Picard groups, together with structure results on algebraic groups. This is joint work with Bruno Laurent.