

## $K_2$ of elliptic curves over non-Abelian cubic and quartic fields

*Monday, 3 June 2024 16:00 (1 hour)*

After a review of some earlier results on (mostly)  $K_2$  of curves, we give constructions of families of elliptic curves over certain cubic or quartic fields with three, respectively four, ‘integral’ elements in the kernel of the tame symbol on the curves. The fields are in general non-Abelian, and the elements linearly independent. For their integrality, we discuss a new criterion that does not ignore any torsion. We also verify Beilinson’s conjecture numerically for some of the curves. This is joint work with François Brunault, Liu Hang, and Fernando Rodriguez Villegas.

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