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Darmon points on elliptic curves over number fields of arbitrary signature. (English)

Zbl 1391.11081


Summary: We present new constructions of complex and $p$-adic Darmon points on elliptic curves over base fields of arbitrary signature. We conjecture that these points are global and present numerical evidence to support our conjecture.

MSC:

11G40 $L$-functions of varieties over global fields; Birch-Swinnerton-Dyer conjecture
11G05 Elliptic curves over global fields
11F41 Automorphic forms on $GL(2)$; Hilbert and Hilbert-Siegel modular groups and their modular and automorphic forms; Hilbert modular surfaces
14G25 Global ground fields in algebraic geometry

Keywords:
Darmon points; signature; Eichler-Shimura isomorphism

Software:
SageMath; PARI/GP

Full Text: DOI arXiv Link

References:


[17] Dasgupta, The $(p^\infty)$-adic upper half plane, in: $(p^\infty)$-adic geometry pp 65– (2008) - Zbl 1153.14021

