
CHRISTOPHE CORNUT, CNRS, Institut de Mathematiques de Jussieu
An Euler System for automorphic symplectic motives?

Let K be a CM field with totally real subfield F . Let M be a motive over F with coefficient in a number field C . Suppose that M is symplectic and pure of weight -1 .

In some cases, the Bloch–Kato conjectures and global sign considerations suggest that there should exist an Euler System for M over K . Under some further assumptions (automorphicity and behavior of M at the archimedean places), conjectures of Langlands, Vogan, Arthur and local sign considerations suggest the construction of (a candidate for) such an Euler system. For $M = h^1(E)(1)$ with E an elliptic curve over $F = \mathbb{Q}$, the whole process yields just the classical Euler system of Heegner points.