F. Ledrappier

Title:

Fluctuations of ergodic sums for some infinite horocycle flows

Abstract:

We consider the horocycle flow on the unit tangent bundle to an abelian infinite cover of a finite volume surface. We show that one can recover the integral of a function from its time series by a double averaging procedure. The proof uses several aspects of the randomness of the geodesic flow on the finite volume quotient.