

Limit theorem for interval exchange maps

Alexei KLIMENKO

Steklov Mathematical Institute
of Russian Academy of Sciences
RUSSIAN FEDERATION

A. Bufetov proved limit theorem for translation flows on flat surfaces (as well as for Vershik flows, their symbolic analogues).

His result states that for a generic flow and a weakly Lipschitz function with zero average that does not belong to some linear subspace, the distribution of ergodic integral tends to the distribution of the finitely-additive cocycle corresponding to the second Lyapunov exponent of the flow.

I will discuss the similar result for interval exchange transformations.

The difficulty here is that for a translation flow there is a flow along another foliation, hence one can use duality between the corresponding cocycles. For i.e.t.'s there are no such flow, so we need to develop some substitute.