Séminaire commun Probabilités et Statistiques, Dynamique et Géométrie

Mardi 28 Février à 15h30
Laboratoire Dieudonné
Salle de Conférences

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Statistical properties and robust minimality for smooth random walks on surfaces

We study smooth group actions and random walks on surface under a mild assumption called "weakly expanding". In particular, we prove that some statistical properties (large deviation, equidistribution, etc.) for non-abelian semigroup of linear action on the torus persist under C^1 conservative perturbation of the generators. In addition we give a sufficient condition and an example for robust minimality of the action of semigroup generated by conservative diffeomorphisms on the surfaces.

This is a joint work with X. Liu.