

Limit theorems on nilpotent Lie groups

Timothée Bénard 英国剑桥大学

邀请人：黄逸超

摘要： I will talk about my recent work with E. Breuillard establishing limit theorems for random walks on nilpotent Lie groups. Most previous works assumed the law of increment to be centered in the abelianization of the group. Our major contribution is to allow the law of increment to be non-centered. In this case, new phenomena appear: the large scale geometry of the walk depends on the increment average, and the limiting measure in the central limit theorem may not have full support in the group.

个人简介： Timothée is a postdoctoral researcher at the Centre for Mathematical Sciences in Cambridge UK. He is interested in random walks on Lie groups or their quotient by a discrete subgroup. The mathematical tools involved come from Probability Theory, Dynamical Systems, and Lie Group Theory. His Ph.D. thesis was supervised by Yves Benoist, and he is now working with Emmanuel Breuillard and Péter Varjú. He was awarded the doctoral prize of Laboratoire de Mathématiques Blaise Pascal.

时间： 2023年4月19日 15: 15-16:15

地点： 文萃楼B221