

1099-03-154

Anush Tserunyan* (anush@illinois.edu). *Mixing and triple recurrence in probability groups.*

We consider a class of groups equipped with an invariant probability measure that respects the group structure in an appropriate sense; call such groups probability groups. This class contains all compact groups and is closed under taking ultraproducts with the induced Loeb measure. We prove a triple recurrence result for mixing probability groups, which generalizes a recent result of Bergelson-Tao proved for ultra quasirandom groups (the latter being examples of mixing probability groups), nevertheless having a considerably shorter proof. (Received February 06, 2014)