ALEXANDER BERENSTEIN, Universidad de los Andes–Université Claude Bernard Lyon 1
Actions of groups on probability measure algebras: a model theory perspective

For a countable amenable group G, we consider probability measure algebras equipped with a measure preserving action of G from the perspective of continuous logic. We characterize the actions corresponding to the class of existentially closed separable structures as the ones arising from free actions of G on Lebesgue spaces. We also show that for a non-amenable group G there are free actions by measure preserving automorphisms on a probability space that do not induce existentially closed structures. This is joint work with Ward Henson.