

# MODEL THEORY OF STRONGLY ERGODIC ACTIONS

TOMÁS IBARLUCÍA

ABSTRACT. I will discuss novel applications of continuous logic to ergodic theory. More precisely, I will give a model-theoretic interpretation of some rigidity phenomena associated with strongly ergodic actions of countable groups. The model-theoretic viewpoint allows us to go one step further and obtain a new result about coalescence of systems with generalized discrete spectrum, with an application to actions of property (T) groups. This is joint work with Todor Tsankov.

INSTITUT DE MATHÉMATIQUES DE JUSSIEU–PRG, UNIVERSITÉ PARIS 7, CASE  
7012, 75205 PARIS CEDEX 13, FRANCE

*E-mail address:* `ibarlucia@math.univ-paris-diderot.fr`