

Title. Treeability and planarity in measured group theory

Abstract. We show that several new classes of groups are measure strongly treeable, i.e., all of their free measure-class-preserving actions are treeable. This includes all finitely generated groups admitting planar Cayley graphs, all finitely generated elementarily free groups, and more generally all groups arising as the fundamental group of an “IFL tower” over these groups. Our techniques also lead to new measure strong free factors of groups, i.e., group elements which generate a primitive subrelation in every free measure-class-preserving action. This is based on joint work with Clinton Conley, Damien Gaboriau, and Andrew Marks.