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Andrew Nicas and **David Rosenthal*** (rosenthd@stjohns.edu). *Finitely \mathcal{F} -amenable actions and decomposition complexity of groups.*

In his work on the Farrell-Jones Conjecture, Arthur Bartels introduced the concept of a “finitely \mathcal{F} -amenable” group action, where \mathcal{F} is a family of subgroups. In this talk we will discuss some coarse geometric applications of finitely \mathcal{F} -amenable actions. One application states that if G is a countable group that is relatively hyperbolic with respect to peripheral subgroups that are contained in a collection, \mathfrak{C} , of metric families that satisfies some basic permanence properties, then G is in \mathfrak{C} . (Received January 28, 2019)