

“The cost of a group action”

Héctor Jardón-Sánchez

The aim of this talk is to introduce the notion of cost of a group action. Cost is an orbit equivalence invariant defined, roughly, as a measured version of the rank of a group. There are still many open questions around cost, such as the Fixed Price Problem. Some of these questions are closely linked with conjectures in other areas of mathematics such as topology.

In the talk, we will introduce cost, illustrate the notion by some examples, and point out some of the open questions around it. We will then discuss a recent result of Hutchcroft and Pete: groups with Kazhdan’s Property (T) have cost 1. Time permitting, we will outline the ideas of a proof that generalizes the Hutchcroft-Pete Theorem to countable Borel equivalence relations with measured Property (T).

This talk is based on joint work with Łukasz Grabowski and Sam Mellick.