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Polish groups with the pinned property

Given an analytic equivalence relation E on a Polish space X with all classes Borel, one can define a "virtual E-class" to be a infinity-Borel code which becomes a Borel code for an E-class in any generic extension in which it becomes herediarily countable. For example, the virtual $=^+$-classes correspond to the (possibly uncountable) sets of reals. Then E is considered "pinned" iff every virtual E-class is realized in the ground model. A Polish group G has the "pinned property" iff for every Polish G-space X, the induced orbit equivalence relation E_X^G is pinned. We give an overview of results of Hjorth and Larson-Zapletal, as well as some original work, towards the goal of giving an algebraic characterization of the Polish groups with the pinned property in different models of set theory, such as the Solovay model.