

Logic Seminar

Orbit equivalence relations of some classes of non-locally compact Polish groups

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Abstract: By results of A.S. Kechris, whenever a locally compact Polish group acts continuously on a Polish space, the orbit equivalence relation of the action is essentially countable—that is, Borel reducible to the orbit equivalence relation of an action of a countable group. It is unknown if this characterizes the locally compact Polish groups. S. Solecki, after proving an analogous characterization for smooth actions of compact Polish groups, showed this to be true in the case where the group, G , is the additive group of a separable Banach space. The characterization also holds for abelian pro-countable groups, by results of M. Malicki. We discuss recent work on this problem, including an extension of this characterization to some important classes of Polish groups. This is joint work with A.S. Kechris, M. Malicki, and A. Panagiotopoulos.

Tuesday, November 12 at 3:30 PM in 427 SEO