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Partitions of permutation groups

Let $\mathcal{H}$ be an ultrahomogeneous structure on a set R. The properties of $\mathcal{H}$ to be *age indivisible, weakly indivisible, has a canonical partition, is indivisible, the age is a Ramsey class, or the distinguishing number*, etc., are actually properties of the automorphism group of $\mathcal{H}$. On the other hand if G is a group of bijections on R closed in the discrete topology then there is an ultrahomogeneous structure $\mathcal{H}$ on R with automorphism group G. The partition properties alluded to above can be directly defined in permutation theoretic terms. If G then acts as a topological group on a compact Hausdorff space or $\mathcal{H}$ is the group of isometries of a homogeneous metric space on R then some of the partition properties of $\mathcal{H}$ or of structures related to $\mathcal{H}$ imply topological properties of the group.

The relation between the various partition properties is in one direction quite easy to establish but poses an interesting problem in several of the other directions.