▸ BORIŠA KUZELJEVIĆ, *Antichains of copies of ultrahomogeneous structures.*
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We analyze possible cardinalities of maximal antichains of isomorphic copies of countable ultrahomogeneous structures. For a countable ultrahomogeneous relational structure X, $\mathbb{P}(X)$ denotes the set of all substructures of X isomorphic to it. A copy $Y \in \mathbb{P}(X)$ is called *large* if it intersects each orbit of X. We say that a collection $\mathcal{A}$ of copies of X is an antichain in $\mathbb{P}(X)$ if X cannot be embedded into the intersection of any two elements of $\mathcal{A}$. We show that if the age of X satisfies the strong amalgamation property, then the structure X can be partitioned into countably many large copies and there is an almost disjoint family of large copies of size continuum. We also show that for a countable ultrahomogeneous poset P, there is a maximal antichain of size continuum in $\mathbb{P}(P)$, while there is a countable maximal antichain in $\mathbb{P}(P)$ if and only if P is not isomorphic to a countable antichain or a disjoint union of infinitely many rational lines. This is joint work with Miloš Kurilić.