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Homogeneous structures associated with complete theories of two variables

The two-variable fragment of the first-order logic is essential in theoretical computer science. One of the reasons for this is the fact that it has the finite model property (Grädel, Kolaitis and Vardi). We study the following situation. Let M be a finite structure of a language of arity 2. Consider all finite structures which satisfy the same sentences of two variables. We show that they form a cofinal subfamily of the age of some generic structure U . We study standard model-theoretic properties of U . This work is done in collaboration with Ian Pratt-Hartmann and Lidia Tendera.