Equations in algebras induced by beautiful first-order structures

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Abstract

Every first-order structure gives rise to a general algebra via its *polymorphism clone*, which consists of all homomorphisms of finite powers of the structure into itself. This algebra can be examined from the viewpoint of universal algebra, and its equational structure sheds some light on the original first-order structure. We summarize recent results on algebras which are induced in this way by countable *omega*-categorical structures, and how their equational structure relates to the equational structure of finite algebras.