Categoricity Spectra for Polymodal Algebras

Bazhenov N.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016 Springer Science+Business Media DordrechtWe investigate effective categoricity for polymodal algebras (i.e., Boolean algebras with distinguished modalities). We prove that the class of polymodal algebras is complete with respect to degree spectra of nontrivial structures, effective dimensions, expansion by constants, and degree spectra of relations. In particular, this implies that every categoricity spectrum is the categoricity spectrum of a polymodal algebra.

Keywords

Autostability spectrum, Boolean algebra with operators, Categoricity spectrum, Degree spectrum, Polymodal algebra, Turing computable embedding