Degrees of categoricity of computable structures

Fokina E., Kalimullin I., Miller R.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Defining the degree of categoricity of a computable structure M to be the least degree d for which M is d-computably categorical, we investigate which Turing degrees can be realized as degrees of categoricity. We show that for all n, degrees d. c. e. in and above $0^{(n)}$ can be so realized, as can the degree $0^{(\omega)}$. © 2009 Springer-Verlag.

Keywords

Categoricity spectrum, Computability, Computable model theory, Computable structure, Degree of categoricity