1145-03-1607 **Valentina Harizanov***, Department of Mathematics, Washington, DC 20052. *Effectively categorical structures.*

Since we are interested in transferring computability-theoretic properties of structures, we investigate computable isomorphisms. A computable structure is computably categorical if for every computable isomorphic copy of the structure there is a computable isomorphism. Remmel characterized computably categorical linear orderings and Boolean algebras. The same characterization was obtained independently by Dzgoev and Goncharov. For these structures, computable categoricity corresponds to the existence of computably enumerable Scott family of existential formulas. Surprisingly, this is not always the case. Goncharov provided the first example where this correspondence of computability and definability does not exist. We will present some new examples of such structures. We will also discuss structures categorical at higher levels of arithmetical hierarchy and their degrees of categoricity. (Received September 23, 2018)