Lobachevskii Journal of Mathematics 2014 vol.35 N4, pages 339-347

On computably enumerable structures

Khoussainov B. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014, Pleiades Publishing, Ltd. This is a short article based on the plenary lecture presented by the author at Algebra Computability and Logic conference in Kazan, June 1-6, 2014. The paper is a new approach that introduces effectiveness into the study of algebraic structures. In this approach the initial objects are the domains of the form ω/E , where E is an equivalence relation on ω . In this set-up one investigates effective algebraic structures that are admitted by domains of the form ω/E . This lecture was motivated by the papers [2, 20, 21], open questions in [17], and is based on the papers [15, 16, 19, 23].

http://dx.doi.org/10.1134/S1995080214040180

Keywords

Computable structures, computably enumerable structures, universal algebras