

Degrees of Autostability Relative to Strong Constructivizations for Boolean Algebras

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Abstract

© 2016, Springer Science+Business Media New York. It is proved that for every computable ordinal α , the Turing degree $0(\alpha)$ is a degree of autostability of some computable Boolean algebra and is also a degree of autostability relative to strong constructivizations for some decidable Boolean algebra. It is shown that a Harrison Boolean algebra has no degree of autostability relative to strong constructivizations. It is stated that the index set of decidable Boolean algebras having degree of autostability relative to strong constructivizations is Π_1^1 -complete.

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Keywords

autostability, autostability relative to strong constructivizations, Boolean algebra, degree of autostability, degree of categoricity, index set