

Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 2015 vol.9136, pages 177-185

Nonexistence of minimal pairs in $L[d]$

Fang C., Liu J., Wu G., Yamaleev M.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Springer International Publishing Switzerland 2015. For a d.c.e. set D with a d.c.e. approximation (Formula presented.), the Lachlan set of D is defined as (Formula presented.). For a d.c.e. degree d , $L[d]$ is defined as the class of c.e. degrees of those Lachlan sets of d.c.e. sets in d . In this paper, we prove that for any proper d.c.e. degree d , no two elements in $L[d]$ can form a minimal pair. This result gives another solution to Ishmukhametov's problem, which asks whether for any proper d.c.e. degree d , $L[d]$ always has a minimal element. A negative answer to this question was first given by Fang, Wu and Yamaleev in 2013.

http://dx.doi.org/10.1007/978-3-319-20028-6_18
