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Research note

Singlet particles as cold dark matter in θ -exact non-commutative space-time

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Abstract

First, singlet dark matter annihilation into pair charged fermions and pair w^\pm bosons was studied to the first order of non-commutativity parameter in perturbative model. Our results are different from the results reported in some previous studies. Then the problem is formulated in θ -exact non-commutative space-time and non-perturbative model, then the exact results are presented.

Keywords: dark matter, singlet fermion, singlet scalar, non-commutative space-time

For full article, refer to the Persian section