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Fermionic dark matter in a Left-Right Model with mirror fermions

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In this work we investigate an extension of the SM with Left-Right symmetry that includes additional mirror fermions, copies of the SM fermions with opossite quirality and charged under the $SU(2)_R$. The motivation for introducing these mirror fields in a Left-Right extension is to analyse the well known CP problem. We have propose a candidate for dark matter which arises from the mixture of mirror and sterile neutrinos. We have obtain the allowed parameter region for the model in accordance with the thermal relic density and the direct detection constraints. We also disscuss the possibility of further constraint the parameter region via collider data.

Poster fallback option for rejected abstracts for parallel oral presentations

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