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A dark matter model with Dirac neutrino masses

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Tiny neutrino masses can be obtained if right-handed neutrino masses charged under a global U(1) symmetry and a second Higgs doublet which is also charged under the U(1) obtains tiny vacuum expectation value.
Due to the symmetry Majorana mass terms of the right-handed neutrinos are not allowed and the usual seesaw mechanism does not work.
We can also introduce dark matter candidates whose stability is also guaranteed by the same U(1).
I'll talk about the phenomenology of this model.

Summary

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