Contribution ID: **927** Type: **Talk**

An extensive study of dark matter and neutrino phenomenology in the Triplet + Singlet Scotogenic Model

Thursday, 30 July 2020 11:00 (15 minutes)

In this talk, I will address the possibility that the nature of dark matter is associated with neutrino mass generation.
Focusing on an extension of the Standard Model where the light neutrino masses are generated radiatively, we study the properties of a dark matter candidate which is made stable by the same symmetry responsible for the radiative origin of neutrino masses. Also, the model studied proposes a dark matter candidate that could be both a neutral scalar or a fermion. I will discuss the phenomenology of both scenarios, studying the parameter space which allows to reproduce the observed dark matter abundance. I will also comment on the expected signals in direct detection experiments, via indirect detection probes and at colliders.

Secondary track (number)

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