

Leptogenesis in the minimal Scotogenic Model through annihilation and coannihilation of scalar Dark Matter

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In this letter we have explored the possibility of embedding the genesis of lepton asymmetry within the well studied *Scotogenic* model. We have shown that in this model one can have a Dark Matter in the TeV scale. The model is highly constrained in the context of dark matter, neutrino mass, Flavor Physics and now also gets an additional constraint on the relative complex phases from the required lepton asymmetry which eventually converts to the observed baryonic asymmetry through the sphaleron transition during the electroweak phase transitions.

Primary author: Dr DASGUPTA, Arnab (Seoul National University of Science and Technology)

Co-authors: Dr BORAH, Debasish (Indian Institute of Technology, Guwahati, Assam, India); Dr KANG, Sin Kyu (Seoul National University of Science and Technology)

Presenter: Dr DASGUPTA, Arnab (Seoul National University of Science and Technology)

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