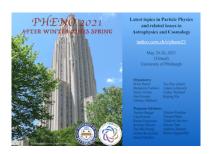
Phenomenology 2021 Symposium



Contribution ID: 1305 Type: Neutrinos

Neutrino masses from simple scoto-seesaw model with spontaneous CP violation

Wednesday 26 May 2021 14:15 (15 minutes)

I will discuss our recent work on a simple scoto-seesaw model that accounts for dark matter and neutrino masses with spontaneous CP violation. This is achieved with a single horizontal \mathcal{Z}_8 discrete symmetry, broken to a residual \mathcal{Z}_2 subgroup responsible for stabilizing dark matter. CP is broken spontaneously via the complex vacuum expectation value of a scalar singlet, inducing leptonic CP-violating effects. We find that the imposed \mathcal{Z}_8 symmetry pushes the values of the Dirac CP phase and the lightest neutrino mass to ranges already probed by ongoing experiments.

Summary

Authors: BARREIROS, D. (CFTP/IST, U.Lisboa); JOAQUIM, F. (CFTP/IST, U. Lisboa); SRIVASTAVA, R. (Indian Institute of Science Education and Research); VALLE, J. (Institut de Física Corpuscular –C.S.I.C./Universitat de Valencia)

Presenter: BARREIROS, D. (CFTP/IST, U.Lisboa)

Session Classification: Neutrino II