NBIA Summer School on Neutrinos: Here, There & Everywhere



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

Monday, 5 July 2021 13:45 (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  $Z_8$  discrete symmetry, broken to a residual  $Z_2$  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  $Z_8$  symmetry pushes the values of the Dirac CP phase and the lightest neutrino mass to ranges already probed by ongoing experiments.

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