The 29th International Workshop on Weak Interactions and Neutrinos



Contribution ID: 196 Type: Parallel talk

Light Sterile Neutrinos: A Modern Picture and a Model to Evade Cosmology (remote)

Friday, 7 July 2023 14:25 (25 minutes)

I will review existing hints and constraints on light sterile neutrinos. I will then explain the primary reasons why these anomalous data sets cannot be simply interpreted as a 1 eV sterile neutrino due to constraints from other experimental probes, notably solar neutrinos and cosmological data sets. I will present a novel, simple model that evades many of these constraints by adding in one new particle, which is the dark matter, beyond a sterile neutrino leading to shape-shifting sterile neutrinos.

Presenter: DENTON, Peter

Session Classification: Parallel talks 5: Neutrino Physics