

MEETING OF THE AMERICAN PHYSICAL SOCIETY DIVISION OF PARTICLES AND FIELDS

Contribution ID: 233

Type: Presentation

## Status of Sterile Neutrino fits with Global Data

Thursday, 3 August 2017 11:21 (18 minutes)

A number of short baseline neutrino oscillation experiments have observed an anomalous excess of neutrinos in the low energy range. This may hint towards the existence of additional neutrino mass splittings. Therefore, additional sterile (non-interacting) neutrino states above the current 3 neutrino model would be required. On the other hand, many parameters of the allowed space are limited by experiments that have seen no anomaly. We will introduce models which accommodate these additional neutrinos, and then discuss our work towards fitting these models to the available global high delta-m2 oscillation data. We will then present the latest results of these fits.

Primary author: Mr DIAZ, Alejandro (Graduate Student at MIT)Presenter: Mr DIAZ, Alejandro (Graduate Student at MIT)Session Classification: Neutrino II

Track Classification: Neutrino Physics