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Sterile Neutrino Global Fits

Tuesday, 30 July 2019 14:00 (20 minutes)

This talk presents results of fits of sterile neutrino models to short baseline oscillation data. This is motivated by a number of experiments that have observed anomalies. We report the latest 3+1 fit result, which is the model traditionally used for comparison. This model has a well-known "tension"between appearance and disappearance that we will discuss. We will then explore extensions to the 3+1 phenomenology, including introducing decay of the fourth mass state, that provide improved fits and reduced tension.

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