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Large Extra Dimensions, Neutrino Oscillations and the Reactor Antineutrino Anomaly

We consider a model where sterile neutrinos can propagate in a large compactified extra dimension giving rise to Kaluza-Klein (KK) modes and the Standard Model left-handed neutrinos are confined to a 4-dimensional spacetime brane. The KK modes mix with the standard neutrinos modifying their oscillation pattern. To set limits on and estimate sensitivities to the size of the largest extra dimension, we examine former, current and future experiments. We also investigate the recent reactor antineutrino anomaly in this context.

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