

Long-baseline neutrino experiments as tests for Lorentz violation

Tuesday 28 July 2009 15:20 (15 minutes)

Lorentz symmetry is a key feature of our best description of nature. Among the different tests of this fundamental symmetry are ones with neutrino oscillations, which can provide a sensitive measurement of suppressed signals of new physics. The talk describes the neutrino sector of the Standard-Model Extension, which represents a general modification of the standard neutrino massive model to include Lorentz and CPT violation. Attainable sensitivities to coefficients for Lorentz violation are estimated for existing and future long-baseline neutrino experiments.

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Session Classification: Neutrino Physics II

Track Classification: Neutrino Physics