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Lorentz symmetry tests with long-baseline neutrino experiments JORGE S. DIAZ, V. ALAN KOSTELECKY, Indiana University, MATTHEW MEWES, Marquette University — Lorentz symmetry is a key feature of our best description of nature. One sensitive class of tests of Lorentz symmetry involves neutrino oscillations, which form an interferometric probe for new physics. This talk describes the modification of the standard three-neutrino massive model to include small Lorentz violations. Corrections to the standard neutrino oscillation probability are used to estimate attainable sensitivities in existing and future long-baseline neutrino experiments.

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