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## Lorentz Invariance Violation tests in astroparticle physics

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At energies approaching the Planck energy scale  $10^{19}$  GeV, several quantum-gravity theories predict that familiar concepts such as Lorentz symmetry can be broken. Such extreme energies are currently unreachable by experiments on Earth, but for photons traveling over cosmological distances the accumulated deviations from the Lorentz symmetry may be measurable using the Cherenkov Telescope Array (CTA). Therefore, current and future generation of gamma-ray experiments are expected to improve our understanding of fundamental physics.

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