

Abstract Submitted  
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**Penning-Trap Signals for Lorentz and CPT Violation** YUNHUA DING, V. ALAN KOSTELECKÝ, Indiana University - Bloomington — Prospective signals for Lorentz and CPT violation are studied for Penning-trap experiments. The general effective field theory known as the Standard-Model Extension is used to identify observable signals in measurements of anomaly and cyclotron frequencies of trapped particles and antiparticles. Constraints are obtained from existing data on coefficients controlling Lorentz- and CPT-violating operators of arbitrary dimension, and sensitivities in future experiments are discussed.

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