

Abstract Submitted
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Post-Newtonian Gravity with Lorentz Violation QUENTIN G. BAI-
LEY, ALAN KOSTELECKY, Indiana University — Lorentz-symmetry violation is
a popular candidate signal for Planck-scale physics. The general description of ob-
servable Lorentz-symmetry violation at low energies is given by the Standard-Model
Extension (SME). This talk discusses the pure gravitational sector of the SME in
the limit of Riemann geometry and presents some key results for the post-newtonian
limit. We outline several promising possibilities for experimental searches, including
some with the potential to access unmeasured coefficients for Lorentz violation and
others that could improve existing sensitivities.

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