

Abstract Submitted
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A new test of short-distance gravity TED COOK, ERIC ADELBERGER, ERIK SWANSON, University of Washington — We have used a Fourier-Bessel torsion balance to test the Newtonian inverse-square law (ISL) at distances below $50 \mu\text{m}$. Our new limits on ISL-violating Yukawa parameters α and λ constrain the maximum size of extra spatial dimensions predicted by string theory and place interesting limits on other exotic interactions such as Chameleon fields. An overview of our experimental methods, current results, and future plans will be presented.

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