

Abstract Submitted
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New limits on violations of the equivalence principle from solar system observations JACK MITCHAM, JAMES OVERDUIN, Towson University — The equivalence principle is the foundation of general relativity theory, but violations of this principle are generically predicted by theories that attempt to unify gravity with the other fundamental interactions of nature. Violations of equivalence could lead to measurable deviations of solar system bodies from their expected positions near stable or semi-stable Lagrange points. We extend earlier constraints using new observational data on Trojan and artificial satellites near Jupiter, Neptune, Mars and Earth.

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