Abstract Submitted
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Cosmological Tests of General Relativity/ ROBERT CALDWELL, Dartmouth College — A detailed analysis of gravitational slip, a post-general relativity cosmological parameter characterizing the degree of departure of the laws of gravitation from general relativity on cosmological scales, is presented. This phenomenological approach assumes that cosmic acceleration is due to new gravitational effects; the amount of spacetime curvature produced per unit mass is changed in such a way that a Universe containing only matter and radiation begins to accelerate as if under the influence of a cosmological constant. Changes in the law of gravitation are further manifest in the behavior of the inhomogeneous gravitational field, as reflected in the cosmic microwave background, weak lensing, and evolution of large-scale structure.

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