

Abstract Submitted
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Structure Formation Limits on $f(R)$ Gravity¹ DAVID BERNAT, RACHEL BEAN, Cornell University, LEVON PEGOSIAN, Simon Fraser University, ALESSANDRA SILVESTRI, MARK TRODDEN, Syracuse University — Modifications to gravity may explain cosmic acceleration without invoking Dark Energy. Two features emerge in the power spectrum of structure formation in modified gravities that are not seen in standard GR: One, a strong suppression of power manifests at a potentially observable length scale. And two, the growth factor is scale dependent. Both these features make modified gravities difficult to reconcile with LSST observations and limit strongly the allowable types of $f(R)$ modifications.

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David Bernat
Cornell University

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