



High Energy Physics - Theory

# Dark energy and dark matter from nonlocal ghost-free gravity theory

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We suggest a class of generally covariant ghost-free nonlocal gravity models generating de Sitter or Anti-de Sitter background with an arbitrary value of the effective cosmological constant and featuring a mechanism of dark matter simulation. These models interpolate between the general relativistic phase on a flat spacetime background and their strongly coupled infrared (Anti)-de Sitter phase with two propagating massless graviton modes.

Comments: 9 pages, LaTeX, final version published in Phys. Lett. B: title changed, discussion of Schwinger-Keldysh technique vs Euclidean field theory extended, presentation improved, references added. arXiv admin note: substantial text overlap with [arXiv:1112.4340](#)

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