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Projective Invariance as the Foundational Principle Beneath Dark Energy and Inflation

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We review the foundational aspects of the newly developed projectively invariant Thomas-Whitehead (TW) model of gravity. This model is an extension of Einstein-Hilbert Gravity, endowed with projective invariance. The importance of projective invariance to gravitation has deep roots in string theory, which we briefly discuss. We demonstrate how dark energy and an inflaton field naturally emerge from TW gravity and explore the possibilities of connections between the two.

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