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Inflation with weakly broken Galileon symmetry

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In Effective Field Theories (EFT), symmetries (exact and approximate) play a key role in legitimizing the size and the hierarchy of the Wilson coefficients. With this in mind, in the context of the EFT of single-field inflation, we will study the theoretical and phenomenological consequences of a weakly broken Galileon symmetry, providing novel inflationary scenarios in a class of accelerating backgrounds, largely insensitive to loop corrections because of some curved-space remnant of the non-renormalization theorem for flat-space Galileons. This guarantees the quantum robustness of the classical solutions and the technical naturalness of the couplings.

In particular, we will analyse the novel physical consequences and compare the predictions to the recent observational results.

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