Slow-roll inflation at N3LO (as deviations from a purely de Sitter background)

Wednesday 30 October 2024 12:10 (20 minutes)

In the context of slow-roll inflation, deviations from a purely de Sitter background are expected and are both separate and complementary to the loop corrections in various inflationary scenarios. In this talk, I propose to go over some of the most up-to-date computations of the inflationary scalar and tensor slow-roll power spectra at next-to-next-to-next to leading order (N3LO), fully expanded around an observable pivot wavenumber, for all single field inflationary models having minimal and non-minimal kinetic terms. This result therefore encompasses string-inspired inflationary models having a varying speed of sound. The aim is to contribute to this workshop by highlighting the classical corrections alongside loop corrections in inflationary predictions.

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