

Observational degeneracy between non-canonical and canonical single field inflation

Thursday 27 September 2012 16:50 (20 minutes)

We discuss observational degeneracy between non-canonical and canonical single field inflation. We map the dynamics of the non-canonical inflationary trajectory to a Lagrangian with canonically normalized kinetic term and a scalar potential. At the level of the two-point function, the two theories are observationally degenerate at all times. To obtain observational degeneracy at the level of the three-point function, we add sinusoidal contributions to the scalar potential. These give rise to resonant non-Gaussianities, whose superpositions are shown to approximately match equilateral non-Gaussianity which is characteristic for non-canonical inflation. We discuss explicit examples such as DBI-inflation.

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Session Classification: Parallel Session 2: Cosmology & Astroparticle Physics

Track Classification: Cosmology & Astroparticle Physics