A link between the EW physics and the Higgs inflation

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We discuss cosmology in a scale invariant model with renormalization prescription which preserves the scale invariance even at quantum level. The difference in renormalization prescription (preserving or breaking the scale invariance) has significant impacts both on early and late time cosmology. We also discuss a theoretical aspect that such models with quantum scale invariance are non-renormalizable and hence interpreted as effective field theory. The associated cut-off scale can be higher than the Hubble scale during inflation and it's possible to make a prediction of the inflationary observables within the effective field theory.

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