

Quintessential Inflation in Palatini Gravity

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Quintessential inflation aims to explain both inflation and dark energy using a single degree of freedom in a common theoretical framework. This economic proposal explains away the coincidence problem of quintessence by means of the inflationary attractor. Model building quintessential inflation is rather difficult because a successful model must account for both inflation and dark energy observations. An effort to achieve quintessential inflation in the context of modified gravity in the Palatini formulation is presented. The model is shown to satisfy CMB observations and generate definite predictions for the running of the dark energy barotropic parameter as well as a spike in primordial gravitational waves, soon to be observable.

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