

α -attractor model studied using Semiclassical Methods

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Abstract

In this work, we solve the scalar and tensor perturbation equations for the α -attractor inflationary model numerically and using the third-order phase-integral method. This inflationary model has become very important because it allows us to describe the initial accelerated expansion of the universe in the inflationary epoch and the current accelerated expansion with the same potential. Once the observables are calculated we conclude that semiclassical methods give excellent results compared to numerical integration.