

Contribution ID: 5 Type: oral

Resolving the power spectrum generated during inflation

Wednesday, November 13, 2013 2:20 PM (25 minutes)

Recently there have been differing viewpoints on how to evaluate the curvature power spectrum generated during inflation. In a series of papers by Parker and collaborators it has been argued that the renormalization scheme adopted for the inflaton field phi(x) to make <phi $^2(x) > finiteshould also be applied to <math>|phi_k|^2$. But this then modifies the curvature power spectrum in an trivial way. On the other hand, others (Durrer, Marozziand Rinaldi) have criticized this approach and suggested alternatives, we trivial regularization, is still valid.

Published in Phys.Rev. D87 (2013) 087302 by Mar Bastero-Gil, Arjun Berera, Namit Mahajan and Raghavan Rangarajan.

Primary authors: Dr BERERA, Arjun (University of Edinburgh, UK); Dr BASTERO-GIL, Mar (Universidad de Granada, Spain); Dr MAHAJAN, Namit (Physical Research Laboratory, India); Dr RANGARAJAN, Raghavan (Physical Research Laboratory, India)

Presenter: Dr RANGARAJAN, Raghavan (Physical Research Laboratory, India)

Session Classification: Cosmology I

Track Classification: Cosmology