Nonpeturbative QFT: Methods and Applications



Contribution ID: 24 Type: not specified

New Light on an Old Idea: The Starobinsky Model from Superconformal D-term Inflation

Thursday 26 September 2013 14:00 (30 minutes)

A remarkable feature of the recently published Planck data is that one of the oldest models of inflation, the R^2 inflation model proposed by Starobinsky, fits the data strikingly well. In this talk, I show how the Starobinsky model arises asymptotically in the large field limit of a supergravity D-term hybrid inflation model based on an approximate superconformal symmetry. This superconformal symmetry implies a remarkably simple structure in the Jordan frame, leading to a well-motivated and highly predictive class of models.

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Session Classification: Parallel Session 2: Cosmology & Astroparticle Physics

Track Classification: Cosmology & Astroparticle Physics