Nonpeturbative QFT: Methods and Applications



Contribution ID: 19 Type: not specified

Electroweak vacuum stability in the inflationary cosmology

Thursday 26 September 2013 17:10 (20 minutes)

Recent LHC results suggest the electroweak vacuum metastability. Although its lifetime is longer than the cosmic age in almost all the parameter space, quantum tunneling to the unwanted true vacuum in the quasi-de Sitter background may occur during inflation. This, in turn, constrains severely high-scale inflation models. In this talk, we discuss how to avoid such tunneling during high-scale inflation and give new constraints on parameters of inflation models, such as reheating temperature.

Primary author: Dr KAMADA, Kohei (DESY)

Presenter: Dr KAMADA, Kohei (DESY)

Session Classification: Parallel Session 1 + 2: Particle Phenomenology and Cosmology & Astroparti-

cle Physics

Track Classification: Cosmology & Astroparticle Physics