

Unitarity in Models of Particle Physics and Inflation

Thursday, 7 June 2012 18:20 (0:20)

Abstract content

Particle physics models with a large number of fields coupled to general relativity can suffer from a breakdown of perturbative unitarity below the effective Planck scale. This brings into question the validity of their effective field theory descriptions and can indicate the onset of new physics. This talk will discuss these issues and their consequences in the context of large extra dimensions, little string theory (linear dilaton models), GUTs and Higgs inflation.

Primary author(s) : Mr. ATKINS, Michael (University of Sussex)

Presenter(s) : Mr. ATKINS, Michael (University of Sussex)

Session Classification : Cosmology

Track Classification : Cosmology