Contribution ID: **30** Type: **oral**

On Model-Dependence in String Inflation

Wednesday, November 13, 2013 3:35 PM (25 minutes)

This year the Planck Collaboration has ruled out many models of inflation that would have informed us of new physics. The models which survived the data release are fairly close to vanilla: single-field inflation with a nearly Gaussian, slightly redshifted spectrum. Well-studied scenarios in the string inflation context include inflection point inflation and the Starobinsky-like models.

We report on searches for model independent predictions for inflation in the context of these string models. In particular, we examine how these scenarios can provide an explanation of the low power at large scales anomaly which persists in the CMB data. We present a general mechanism for this phenomena in term the "slow-roll" paradigm, and explain to what extent this can provide information about the UV physics. We point out a striking similarity between the these and comment about its implications for string inflation models and the study of inflation in general.

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Session Classification: Cosmology I

Track Classification: Cosmology