

# Fundamental physics in the cosmos: The early, the large and the dark Universe



Contribution ID: 46

Type: **not specified**

## Dealing with axion monodromy and other oscillating inflationary models

*Thursday 28 September 2017 16:39 (17 minutes)*

Despite the increasingly more precise constraints on the amplitude and tilt of the primordial power spectrum, the shape of the inflaton potential is still largely unconstrained. This allows for potentials with oscillating contributions, such as the string theory motivated axion monodromy inflation. However, dealing with these models is computationally expensive, and as such analytical approximations are generally used. In this talk I will discuss the first fully numerical treatment of axion monodromy inflation using the Boltzmann code CLASS, emphasising the noticeable differences with the analytical methods, as well as presenting the most recent constraints for this model obtained with the Planck data.

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**Session Classification:** Parallel Sessions: Cosmology & Astroparticle Physics - Inflation + Gws

**Track Classification:** Cosmology & Astroparticle Physics