



Contribution ID : 149

Type : Contributed talk

## Warm Relaxation of the Weak Scale

*Wednesday, 25 May 2016 17:50 (20)*

Cosmological relaxation of the electroweak scale employing the minimal QCD relaxion mechanism is still viable, provided inflation occurs at finite temperature. The  $\Theta$ -angle problem of the original model is overcome by suppressing the barrier size during relaxation. After relaxation, the suppression is removed and the barrier growth gives rise to the required value of  $\Theta \sim \mathcal{O}(10^{-9})$ . In contrast to other solutions of QCD relaxion models, no axion-inflaton coupling is required. In this case the resolution comes about through a modification of the inflation sector, independently of the relaxion implementation.

**Primary author(s)** : YOU, Tevong (University of Cambridge)**Co-author(s)** : Dr. MCCULLOUGH, Matthew (CERN)**Presenter(s)** : YOU, Tevong (University of Cambridge)**Session Classification** : Cosmo 3**Track Classification** : Astro/Cosmo/Neutrinos