

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



Contribution ID: 38

Type: **not specified**

CP-violation and baryon-asymmetry from varying Yukawas at the weak scale.

Wednesday 27 September 2017 17:13 (17 minutes)

Varying Yukawas open new possibilities for electroweak baryogenesis. In this talk I will focus on the CP-violation and the baryon-asymmetry. Starting from first principles, I will derive the general form of the CP-violating semiclassical force and the diffusion equations for models with varying Yukawa couplings. This represents a very general framework to determine the baryon-asymmetry generated in a given model. I will discuss the necessary ingredients for successful baryogenesis and I will apply this framework to different models and discuss the CP-violation and the amount of baryon-asymmetry produced.

Primary author: Mr BRUGGISSER, Sebastian (DESY Theory-Group)

Presenter: Mr BRUGGISSER, Sebastian (DESY Theory-Group)

Session Classification: Parallel Session: Cosmology & Astroparticle Physics - Baryogenesis

Track Classification: Cosmology & Astroparticle Physics