



Contribution ID: 70

Type: **not specified**

Baryogenesis in non-minimal mimetic gravity

Thursday 31 August 2023 21:45 (5 minutes)

We studied Gravitational baryogenesis in context of non-minimal mimetic gravity where mimetic matter is nonminimally coupled to Ricci scalar. Baryogenesis is considered as a process in which baryons excess over anti-baryons in the early stage of the universe. We explored how nonminimally coupled mimetic gravity could shed light on the problem of baryon asymmetry successfully. Various types of baryogenesis interaction are considered in this piece of work also the effects of these interactions on the baryon to entropy ratio for this model is discussed. In addition, we have shown that baryon asymmetry could be non-zero in this set up during the radiation era while the universe was expanding. Moreover, we investigated baryon to entropy ratio for some specific models of non-minimal mimetic gravity then using the observational data we defined some constraints on space parameters in these models.

Presenter: HOSSEINKHAN, Niloufar

Session Classification: Posters of thursday (ignore time)