

WIMPy baryogenesis with Primordial Black Hole

Monday, 12 June 2023 17:30 (20 minutes)

We propose a model of baryogenesis achieved by the annihilation of non-thermally produced WIMPs from Primordial Black Hole (PBH). Dark Matter (DM) particles can be produced by PBH evaporation and consequently re-annihilate into lighter particles even after thermal freeze-out. The re-annihilation of DM provides the observed baryon asymmetry and the correct relic abundance of DM depending on the PBH evaporation temperature.

Secondary category for the parallel session (optional)

Dark Matter Physics

Primary authors: LKHAGVADORJ, Erdenebulgan (Sungkyunkwan University); CHOI, Ki-Young (Sungkyunkwan University)

Presenter: LKHAGVADORJ, Erdenebulgan (Sungkyunkwan University)

Session Classification: Parallel: Astroparticle 1

Track Classification: Parallel Sessions: Astroparticle physics