

New Horizons in Primordial Black Hole physics (NEHOP)



Contribution ID: 57

Type: **Highlight talk**

Direct detection of light dark matter from evaporating primordial black holes

Wednesday, 21 June 2023 10:20 (10 minutes)

Light Dark Matter has recently gained a lot of attention. Generally, direct detection of sub-GeV Dark Matter is challenging since it induces low recoil energies. The problem is solved by considering light Dark Matter with considerable kinetic energies. In this talk, we point out that Primordial Black Hole evaporation is a source of boosted light dark Matter with energies of tens to hundreds of MeV. Considering XENON1T data, we constrain the mixed parameter space of Primordial Black Holes and sub-GeV Dark Matter.

Presenter: CALABRESE, Roberta (Università degli studi di Napoli "Federico II")

Session Classification: Session 9