COSMO'22



Contribution ID: 39 Type: Plenary/Parallel talk

Axion cosmology: production and experimental constraints

Monday, 22 August 2022 11:40 (40 minutes)

Axions and axion-like particles are a leading candidate for composing the dark matter in the universe. After reviewing how they emerge in the context of particle physics, we will discuss their production in the early Universe and the prospects for their detection. Interestingly, the distribution of axions is generically expected to be non-homogeneous, and we will discuss how this may lead to the production of primordial black holes or be linked to the mysterious fast radio bursts.

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Track Classification: Dark matter, neutrinos & astroparticle physics