Séminaire commun

Inflationary and Post-Inflationary Scalar Dark Matter Production

Mathias Pierre

DESY Hamburg

Mercredi 28 Fevrier 2024 à 15:15

LPENS – Conf IV-E244, 24 Rue Lhomond

Résumé

Dark matter is one of the great mysteries of modern physics. In addition to its precise nature, its production mechanism remains unknown. In this talk I will discuss the possibility of producing scalar dark matter candidates during and after cosmic inflation. By describing the transition from an inflationary epoch to a late-time cosmology, I will describe how the dynamics of the universe can affect the production of dark matter and leave an imprint on cosmology. I will discuss the associated constraints, phenomenological consequences, and possible further developments.