



ID de Contribution: 7

Type: **Non spécifié**

Dark Matter Production from Preheating and Structure Formation Constraints

mercredi 5 octobre 2022 14:10 (25 minutes)

In this talk I will discuss the production of scalar dark matter from the inflaton condensate during inflation and reheating. I will discuss the production regimes assuming that this scalar couples to the inflaton via a direct quartic coupling and gravity: purely gravitational, weak direct coupling (perturbative), and strong direct coupling (nonperturbative). For each regime, I will determine the dark matter phase space distribution, the corresponding relic abundance and derive the corresponding constraints from the Lyman- α forest measurement.

Auteur principal: PIERRE, Mathias (DESY)

Orateur: PIERRE, Mathias (DESY)