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Particle Physics at LPTHE

Mardi 12 Fevrier 2019, 14 :00
LPTHE, Library
Domaines : hep-ph

Titre : *Phenomenology of a flavoured dark sector*

Orateur : **Sophie Renner (Mainz)**

Résumé : *I will discuss the phenomenology of a QCD-like dark sector which confines around the GeV scale. The dark sector inherits a flavour structure from a coupling between dark quarks and SM quarks via a heavy mediator, which leads to a rich phenomenology that can show up in many different experiments. While stable baryonic bound states are the dark matter candidates, experimental signatrues are dominated by the lightest composite mesons, the dark pions, which can have decay lengths ranging from millimetres to hundreds of meters. I will explain the implications of this model for the LHC, dark matter direct detection, and fixed target experiments.*