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Particle Physics at LPTHE

Mardi 15 Janvier 2019, 14 :00
LPTHE, library
Domaines : hep-ph

Titre : *Dark pion DM : WIMP vs. SIMP*

Orateur : **Pyungwon Ko (Korea Inst. Advanced Study, Seoul)**

Résumé : *In this talk, I will first show that dark QCD model can realize the idea that all the particle masses can originate from nonperturbative strong dynamics in the dark sector. Then I will discuss dark matter of the model, the lightest mesons and baryons in the dark sector, focusing on the former. Dark pions could be either WIMP or SIMP DM, depending on the parameters in the chiral Lagrangian describing the dynamics of dark pions. In case of the SIMP scenario, I show that including dark vector mesons can help to realize the SIMP scenario within the validity region of chiral perturbation theory.*