SEMPARIS – Séminaires en région parisienne

`http ://string.lpthe.jussieu.fr/semparis/`

Particle Physics at LPTHE

Mardi 12 Novembre 2024, 14 :00
LPTHE, Library and Zoom (link in the comments)(The seminar will be in person, but Zoom attendance is possible : https ://cern.zoom.us/j/63031219326?pwd=STlDY2l0UTZOTWd3Ty8zaWVQSzNTdz09)
Domaines : hep-ph

Titre : *The GUT way for composite Dark Matter*

Orateur : **Sonali Verma (ULB)**

Résumé : *In this talk, I will consider extensions of the Standard Model (SM) featuring vector-like fermions charged under a new confining force, referred to as dark color. These dark fermions condense to form a spectrum of dark hadrons, with the lightest accidentally stable dark baryon, with a mass of around 100 TeV, serving as a viable thermal dark matter candidate. I will, in particular, consider the grand unified theory (GUT) SU(5) framework for these models, highlighting how gauge coupling unification within the SM imposes stringent constraints on their construction. Additionally, I will discuss the unique cosmological scenarios these unified theories present and their phenomenological implications.*
