## SEMPARIS – Séminaires en région parisienne

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## **Particle Physics at LPTHE**

Mardi 13 Décembre 2016, 14:00

LPTHE, Library

Domaines: astro-ph—hep-ph

Titre: New Directions in Dark Matter Direct Detection

Orateur : Tien-Tien Yu

Résumé: Sub-GeV dark matter is a theoretically motivated but largely unexplored paradigm of dark matter. In this talk, I will discuss recent work on the direct detection of sub-GeV dark matter through dark matter-electron scattering. I will present some motivated models that can be probed with these techniques as well as projections for current and near-term semiconductor and scintillator experiments. Finally, I will discuss some new techniques that may allow us to more robustly discriminate between dark matter signatures and background.