SEMPARIS – Séminaires en région parisienne

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Seminar of the theory group of APC

Mardi 13 Juin 2017, 14:00

APC, 483 A - Malevitch Domaines : hep-th

Titre: Intricacies of the dark universe

Orateur : Kalioppi Petraki (LPTHE, UPMC)

Résumé: Most of the matter in our universe is in the form of dark matter. The research of the past decades led to the development of two canonical paradigms for its properties: the collisionless cold dark matter paradigm, supported by the observed gravitational clustering, and the WIMP paradigm, which provides a well-motivated particle physics framework for collisionless cold dark matter. However, current observational and experimental results motivate looking beyond these scenarios. I will discuss some of this motivation, and new directions and challenges in exploring the phenomenology of dark matter with different particle physics interactions than in the canonical scenario.