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Particle Physics at LPTHE

Mardi 19 Janvier 2021, 14 :00
LPTHE, Seminar via zoom https ://zoom.us/j/96505846187
Domaines : astro-ph—hep-ph—hep-th

Titre : *Pulsars, galaxies and the Sun as laboratories of fundamental physics*

Orateur : **Andrea Caputo (Tel Aviv University & Weizmann)**

Résumé : *I will discuss some possibilities to detect physics beyond the standard model (BSM) using astrophysical data. In particular, I will first show how pulsar data can be used to look for axion-like fuzzy dark matter. Then, I will discuss the prospects of the SKA radio telescope for the detection of dark matter decay into photons. Finally, I will consider the effects of large magnetic fields in the core of stars like the Sun, in particular for the conversion of longitudinal plasmons into axions, a process usually neglected in the literature.*
