Particle and Hadronic Physics Seminar
- IJCLab Pôle Théorie -

« *Light and flavoured dark sectors through the fermion portal* »

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Light dark sectors communicates with the Standard Model through singlet “portal operators”. In contrast with the lower-dimensional Higgs, vector and neutrino singlet portal, we will explore the "fermion portal" case where the dark sector particles couples to a pair of Standard Model fermions. Such light dark sector often features long-lived hidden sector states, whose presence typically offers bright detection prospects at fixed targets, flavour experiments and colliders and may lead to strong astrophysical bounds. We will in particular examine the interplay between missing energy searches, flavour-violating rare mesons decay and the semi-visible three-body decays of dark sector states.
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5 March (Thursday) 11h15
Seminar room, Building 210, Campus d’Orsay