

Séminaire LAL

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vendredi 21 juillet 2017 à 11h00

Searching for Dark Matter at colliders and beyond

Despite the recent discovery of the Higgs boson contributing to the success of the Standard Model of particle physics, the apparent large excess of "Dark Matter" in the universe remains one of the outstanding questions in science. This excess cannot be explained by known particles; a compelling hypothesis is that Dark Matter is comprised of new particles that interact with Standard Model particles, called Weakly Interacting Massive Particles (WIMPs). WIMP Dark Matter can be sought in complementary experiments: direct detection, indirect detection and collider experiments all contribute to a comprehensive set of searches.

This talk focuses on the searches for Dark Matter by the ATLAS experiment at the Large Hadron Collider with a special highlight on the searches that allow to probe a parameter space that is complementary to direct and indirect detection. This talk also highlights recent work by LHC collaborations and by theorists in the context of this complementarity, with the aim of stimulating discussion on potential future connections with astroparticle experiments.

Salle 101 - Bât. 200, Orsay

Thé et café seront servis 15 mn avant le séminaire

Organisation : Reisaburo Tanaka (LAL) - seminaires@lal.in2p3.fr

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