

## Séminaire LAL

Phillip Urquijo (Melbourne University)

jeudi 15 décembre 2016 à 11h00

**ATTENTION**: jour inhabituel!

## Belle II: Searching for New Phenomena at the Intensity Frontier

In February of this year the intensity frontier SuperKEKB e+e- collider, located at the KEK laboratory in Tsukuba, was brought online for its first commission run, a major milestone in preparing for collisions in 2017. The Belle II detector, located at the SuperKEKB interaction point, will be used to probe flavour changing processes of beauty quarks, charm quarks and  $\tau$  leptons produced in e+e-collisions at SuperKEKB to solve some of the most outstanding puzzles in particle physics: the cosmological matter-antimatter asymmetry, the striking mass and coupling hierarchy of elementary particles, and how neutrinos got a mass. New interactions and yet unseen particles must exist to explain these phenomena. In this seminar, I shall discuss the physics driving the Belle II experiment at SuperKEKB, and what we hope to achieve by charting the intensity frontier.

Auditorium Pierre Lehmann - Bât. 200, Orsay

Thé et café seront servis 15 mn avant le séminaire Organisation : Reisaburo Tanaka (LAL) - seminaires@lal.in2p3.fr - http://www.lal.in2p3.fr



