



Contribution ID: 494

Type: **Invited Speaker / Conférencier invité**

Status of the PICASSO and PICO experiments

Tuesday 16 June 2015 13:45 (30 minutes)

The PICO collaboration, a merger of COUPP and PICASSO experiments, searches for dark matter particles using superheated fluid detectors. These detectors can be operated within a set of conditions where they become insensitive to the typically dominant electron recoil background. Additionally, the acoustic measurement of the bubble nucleation makes possible the rejection of additional backgrounds such as alpha decays. This technique also allows for the target nuclei to be changed within the same experiment in order to confirm the properties of dark matter. This presentation reports on the PICASSO experiment that completed taking data in 2014, and the PICO-2L and PICO-60 experiments that were recently commissioned at the Snolab deep underground laboratory in Sudbury.

Author: Dr GIROUX, Guillaume (Queen's University)

Presenter: Dr GIROUX, Guillaume (Queen's University)

Session Classification: T2-8 Cosmic frontier: Dark matter II (PPD) / Frontière cosmique: matière sombre II (PPD)

Track Classification: Particle Physics / Physique des particules (PPD)