



千葉大学大学院理学研究院附属

ハドロン宇宙国際研究センター

International Center for Hadron Astrophysics

12月 ICEHAP セミナー

Date 日時 **12月25日(水) 14:00~16:00**

Place 場所 **ICEHAP オフィス (工学系総合研究棟 1 6階 609-1号室)**

By 講演者 **Romain Gaio 氏**

(Laboratory Nuclear and High-Energy Physics)

Title タイトル

『Dark matter searches with the DAMIC detector』

Abstract 概要

DAMIC (for Dark Matter In CCD) seeks for DM interaction in thick fully depleted CCDs. Thanks to the precise energy estimation, the granularity and the very low noise of these detectors, DAMIC is sensitive to low mass WIMP (below $10\text{GeV}/c^2$) through nuclear recoil but also to hidden sector model through interaction of DM particles with electrons. DAMIC at Snolab, a version of DAMIC experiment with 42 grams of active detector installed at Snolab, has ended its phase of science run accumulating 13kg.day - more than a 20-fold increase compared to the previous publication. We present the latest results of DM searches with this increased exposure combined with an improved background model and give the status of the next generation of this experiment, DAMIC-M, currently in development.

Location: ニュートリノ天文学部門 工学系総合研究棟 1 6階



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