



**International Center
for Hadron Astrophysics**
ICEHAP CHIBA UNIVERSITY

ICEHAP セミナー

Date 日時 10月25日（金） 15:00～17:00

Place 場所 [ICEHAP オフィス \(工学系総合研究棟 1 内 6 階 609-1 号室\)](#)

By 講演者 稲田 知大 氏 (欧州原子核研究機構, リサーチフェロー)

Title タイトル

**『Searches for TeV Dark Matter at the Galactic Centre with
the MAGIC and CTA gamma-ray telescopes』**

Abstract 概要

Dark Matter remains one of the most profound unsolved mysteries in modern physics. Observations of the Galactic Centre (GC) of the Milky Way with ground-based Cherenkov telescopes provide a promising opportunity to search for TeV spectral features associated with dense Dark Matter regions. Ground-based Cherenkov Telescopes, such as MAGIC, located at the Roque de los Muchachos Observatory on La Palma, Spain, have played a crucial role in probing Dark Matter particles over the past decade. The upcoming Cherenkov Telescope Array (CTA), currently under construction, is expected to significantly enhance our search capabilities. This seminar will provide an overview of the search for Dark Matter using Cherenkov telescopes, with a focus on observing the Galactic Centre from the northern hemisphere. Such observations boost sensitivity to gamma rays in the TeV regime due to a significant increase in the telescopes' effective collection area when observing the GC at high zenith angles. The latest results from MAGIC observations will be presented, along with an outline of the prospective contributions of CTA in the near future.