



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

## ICEHAP セミナー

**Date** 日時 4月19日(水) 14:00~16:00

**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 **Kumiko Kotera** 氏 (Institut d'Astrophysique de Paris,  
CNRS/INSU et Sorbonne Universite)

**Title** タイトル

**『Towards EeV Neutrino Astronomy with GRAND』**

**Abstract** 概要

We are living exciting times: we are now able to probe the most violent events of the Universe with diverse messengers (cosmic rays, neutrinos, photons and gravitational waves). One challenge to complete the multi-messenger picture resides in the highest energies, as no ultra-high energy neutrinos have been observed yet. This challenge could be undertaken by the GRAND (Giant Radio Array for Neutrino Detection) project, which aims at detecting ultra-high energy particles, with a colossal array of 200'000 antennas over 200'000 km<sup>2</sup>, split into ~20 sub-arrays of ~10'000 km<sup>2</sup> deployed worldwide. In this talk, we will present preliminary designs and simulation results, plans for the ongoing, staged approach to construction, and the rich research program made possible by the proposed sensitivity and angular resolution.