



# ICEHAP Seminar

**Date**            September 26 Tuesday 10 : 00~12 : 00

**Location**    [ICEHAP Office \(Engineering Research Bldg.1 Room609-1\)](#)

**By**                Dr. Yukiho Kobayashi (ICRR, University of Tokyo)

**Title**

**『First detection of VHE gamma rays from the recurrent nova RS Ophiuchi with CTA LST-1』**

## Abstract

Novae are luminous eruptions that arise in close binaries triggered by a thermonuclear runaway on the white dwarf when it accretes a critical amount of matter from its companion star. Novae are established as high-energy gamma-ray emitters through observations by the Fermi Large Area Telescope, but the origin of the gamma-ray emission had been under intense debate until very recently. The latest outburst of RS Ophiuchi, a well-known recurrent symbiotic nova, was observed by a variety of instruments at different wavelengths, including the first Large-Sized Telescope prototype (LST-1) of the Cherenkov Telescope Array, which covers the very-high-energy gamma-ray spectrum. The LST-1 observations show a clear signal from the burst, and our analysis results support a hadronic origin of the gamma-ray emission, which is also suggested by the H.E.S.S. and MAGIC telescopes. In this talk, I will present the analysis results from the LST-1 observations of RS Ophiuchi, as well as our dedicated work on the calibration of the LST-1 focal-plane camera.