

# **The extreme Universe viewed in very-high-energy gamma rays 2022**

**Monday 06 February 2023 - Tuesday 07 February 2023**

## **Scientific Programme**

## **The extreme Universe viewed in very-high-energy gamma rays 2022**

1st day□

JST **10:30 - 17:55** Monday, 6 February, 2023

2nd day:

JST **10:00 - 16:20** Tuesday, 7 February, 2023

**===JST 10:00 -17:55 Monday, Feb. 6, 2023===**

10:00-10:30 Registration for in-person participants

10:30 -10:35 (5) Opening

### **Session 1: Large Size Telescopes (LSTs) of the Cherenkov Telescope Array (CTA)**

10:35 -11:10 (30+5)

"Status of CTA-LST"

Takayuki Saito (ICRR, Univ. of Tokyo)

11:10 -11:50 (35+5)

"Performance of joint LST-1 + MAGIC analysis chain"

Julian Sitarek (Univ. of Łódź; visiting ICRR)

11:50 -13:00 (70) Lunch

### **Session 2: High-Energy Astrophysical Observatory Network (1)**

13:00 -13:40 (35+5)

"LHAASO status and recent results"

Ruizhi Yang (Univ. of Science and Technology of China)

13:40 -14:20 (35+5)

"IceCube, IceCube-Upgrade, and IceCube-Gen2"

Aya Ishihara (ICEHAP, Chiba Univ.)

14:20 -14:55 (30+5)

"VHE gamma follow-up programs of HE neutrino alerts"

Koji Noda (ICEHAP, Chiba Univ.)

14:55 -15:20 (25) Coffee Break

### **Session 3: Gamma-Ray Bursts (GRBs)**

15:20 -15:50 (25+5)

"The quest for new correlations  
in the realm of the Gamma-Ray Burst - Supernova connection"  
Biagio De Simone (University of Salerno & INFN; visiting NAOJ)

#### **Session 4: High-Energy Astrophysical Observatory Network (2)**

15:50 -16:30 (35+5)

"Current status and future prospects of gravitational-wave observations"  
Soichiro Morisaki (ICRR, Univ. of Tokyo)

16:30 -16:50 (20) Coffee Break

#### **Session 5: Primordial Black Holes (PBHs)**

16:50 -17:30 (35+5)

"Gamma-ray emission from primordial black holes"  
Kazunori Kohri (KEK)

17:30 -17:55 (20+5)

"Search for Primordial Black Holes with the first Large Size Telescope of CTA"  
Shotaro Kanamori (ICRR, Univ. of Tokyo)

**===JST 10:00 -16:20 Tuesday, Feb. 7, 2023===**

#### **Session 6: Cosmic rays and High Energy Gamma-Rays (1)**

10:00 -10:40 (35+5)

"Exploring the role of cosmic rays in galaxies with high energy signatures"  
Ellis R. Owen (Osaka Univ.)

10:40 -11:20 (35+5)

"Physics at the extreme in our Galaxy as viewed in very-high-energy gamma rays"  
Olaf Reimer (Univ. of Innsbruck; visiting ICRR)

11:20 -11:50 (25+5)

"First detection of the very-high-energy gamma rays  
from the recurrent nova RS Ophiuchi with LST-1"  
Yukiho Kobayashi (ICRR, Univ. of Tokyo)

11:50 -13:00 (70) Lunch

#### **Session 6: Cosmic rays and High Energy Gamma-Rays (2)**

13:00 -13:30 (25+5) [online]

"Gamma-ray observations  
in the vicinity of supernova remnants G106.3+2.7 and HB9 "  
Tomohiko Oka (Kyoto Univ.)

13:30 -14:00 (25+5) [online]

"Quantification of the hadronic and leptonic gamma rays  
in SNRs, RX J1713.7-3946 and RX J0852.0-4622"  
Yasuo Fukui (Nagoya Univ.)

14:00 -14:30 (30) Coffee Break

### **Session 7: Active Galactic Nuclei (AGNs)**

14:30 -15:10 (35+5)

"Prospects for Observations of Jetted  
and Unjetted Active Galactic Nuclei with CTA"  
Yoshiyuki Inoue (Osaka Univ.)

15:10 -15:40 (25+5)

"Modern picture of the Intergalactic Magnetic Field search  
with very-high-energy gamma-ray"  
Ievgen Vovk (ICRR, Univ. of Tokyo)

15:40 -16:10 (25+5) [online]

"Formation of hard VHE spectra in X-ray dominated sources"  
Dmitry Khangulyan (Rikkyo University)

16:10 - 16:20 Closing