

# **The extreme Universe viewed in very-high-energy gamma rays 2023**

**Monday 19 February 2024 - Tuesday 20 February 2024**

## **Scientific Programme**

=====

Program:

\* invited talks

===JST 10:00 -17:50 Monday, Feb. 19, 2024===

10:00 - 10:25 Registration for in-person participants

10:25 - 10:30 Opening

Session 1: Large-Sized Telescopes of the Cherenkov Telescope Array(CTA)

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

"Status of the CTA Large-Sized Telescopes"

Daniela Hadasch (ICRR, Univ. of Tokyo)

Session 2: Magnetic Fields and Very-High-Energy Gamma-Ray Emissions

11:10 - 12:00 (45+5)\* [online 9:10 - 10.00pm EST]

"Pulsar magnetospheres and their radiation"

Alexander Philippov (Univ. of Maryland)

12:00 - 13:10 (70) Group photos + Lunch

13:10 - 13:40 (25+5)

"High-energy gamma-rays

from Isolated stellar-mass black hole magnetosphere""

Koki Kin (Tohoku Univ.)

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

"Intergalactic magnetic field constraints with VHE-bright GRBs"

Ievgen Vovk (ICRR, Univ. of Tokyo)

14:20 - 14:50 (25+5)

"Very Bright Gamma-Ray Burst Early Afterglow

from Magnetic Bullet"

Yo Kusafuka (ICRR, Univ. of Tokyo)

14:50 - 15:20 (30) Coffee Break

Session 3: High-Energy Astrophysical Observatory Network (1)

15:20 - 16:00 (35+5)\*

"Latest status and expectations

for the recently born X-ray observatory

XRISM (the X-Ray Imaging and Spectroscopy Mission) "

Yukikatsu Terada (Saitama Univ.)

Session 4: PeVatrons and the Origin of Cosmic Rays

16:00

-

16:50

(45+5)\*

"The LHAASO Status and Recent Results"  
Zhen Cao (IHEP, CAS)

16:50 - 17:20 (25+5)  
"Potential PeV cosmic ray acceleration  
in the middle-aged pulsar-wind nebula HESS J1849-000"  
Sei Kato (ICRR, Univ. of Tokyo)

17:20 - 17:50 (25+5)  
"Development Status of Small-Sized Telescopes"  
Akira Okumura (ISEE, Nagoya Univ.)

18:00 - 20:00 Banquet

===JST 9:30 -16:20 Tuesday, Feb. 20, 2024===  
Session 5: High-Energy Astrophysical Observatory Network (2)  
9:30 - 10:10 (35+5)\* [online 7:30 - 8.10pm EST]  
"Overview and prospect  
of the gravitational-wave transient search  
in LIGO-Virgo-KAGRA's fourth observing run"  
Leo Tsukada (Penn State Univ.)

10:10 - 10:50 (35+5)\*  
"IceCube recent status"  
Nobuhiro Shimizu (Chiba Univ.)

Session 6: Cosmic Rays and Star Formation  
10:50 - 11:30 (35+5)\* [online 9:50 - 10.30am CST]  
"Modeling the ultrahigh-energy gamma-ray bubble  
in the Cygnus star-forming region"  
Ruoyu Liu (Nanjing Univ.)

11:30 - 12:00 (25+5)  
"Multi-messenger Probes of the Cosmic Ray Ecocycle  
in and around the Milky Way"  
Susumu Inoue (Chiba Univ. / ICRR, Univ. of Tokyo)

12:00 -13:10 (70) Lunch

13:10 - 13:40 (25+5)  
"Exploring the origins of very-high-energy emission  
from starburst galaxy populations"  
Ellis R. Owen (Osaka Univ.)

13:40 - 14:10 (25+5)  
"Contribution to the cosmic  $\gamma$ -ray background radiation

from star-forming galaxies"  
Junling Chen (Univ. of Tokyo)

14:10 - 14:40 (30) Coffee Break

Session 7: Active Galactic Nuclei (AGNs) and Transient Sources

14:40 - 15:10 (25+5)

"Gamma-ray emission from AGN disk wind"  
Nobuyuki Sakai (Osaka Univ.)

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

"MAGIC+LST-1 joint analysis of BL Lac 2021"  
Ryo Imazawa (Hiroshima Univ.)

15:40 - 16:10 (25+5)

"Simulation and analysis  
of time-evolutional gamma-ray sources"  
Mitsunari Takahashi (ISEE, Nagoya Univ.)

16:10 - 16:20 Closing