

# **The extreme Universe viewed in very-high-energy gamma rays 2021**

**Monday 21 February 2022 - Tuesday 22 February 2022**

## **Scientific Programme**

## The extreme Universe viewed in very-high-energy gamma-rays 2021

1st day:

JST 13:00-17:00 Monday, Feb. 21, 2022  
(UTC 4:00-8:00, CET 5:00-9:00)

2nd day:

JST 13:00-16:55 Tuesday, Feb. 22, 2022  
(UTC 4:00-7:55, CET 5:00-8:55)

**===JST 13:00-17:00 Monday, Feb. 21, 2022===**

13:00-13:05 (5) Opening

### Session 1: High Energy Gamma-Ray Astrophysics

13:05-13:35 (25+5)

"Status of the CTA project"

Masahiro Teshima (ICRR, Univ. of Tokyo & MPI)

13:35-14:05 (25+5)

"Performance study of the first Large-Sized Telescope  
using MC simulation and observational data"

Seiya Nozaki (Kyoto Univ.)

14:05-14:35 (25+5)

"The Crab Nebula□an electron PeVatron  
or a Super-pevatron of Cosmic Rays?"

Zhen Cao (IHEP, CAS)

14:35-15:05 (25+5)

"Large zenith angle observations with IACTs:

MAGIC detection of Crab Nebula up to 100 TeV and prospects for CTA"

Ivgen Vovk (ICRR, Univ. of Tokyo)

15:05-15:30 (25) Coffee Break

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

15:30-16:00 (25+5)

"Multi-messenger astrophysics of neutron star binary mergers"

Kyohei Kawaguchi (ICRR, Univ. of Tokyo)

16:00-16:30 (25+5)

"Wakefield Acceleration in Jets from NDAFs"

Yoshiaki

Kato

(RIKEN)

16:30-17:00 (25+5)

"Multimessenger astronomy with high-energy neutrinos"

Markus Ackermann (DESY)

**===JST 13:00-16:55 Tuesday, Feb. 22, 2022===**

Session 3: Science with the CTA LSTs

13:00-13:30 (25+5)

"Probing Dark Matter in our Galaxy with the CTA Large Size Telescopes"

Moritz Hütten (ICRR, Univ. of Tokyo)

13:30-14:00 (25+5)

"High energy emission from the millisecond pulsars in globular clusters"

David C. Y. Hui (Chungnam National Univ.)

14:00-14:30 (25+5)

"The comeback of extreme pulsars: what awaits with CTA/LST?"

Giovanni Ceribella (ICRR, Univ. of Tokyo)

14:30-15:00 (30) Coffee Break

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

15:00-15:30 (25+5)

"Some remarks on blazar emission models  
and multimessenger connections in active galactic nuclei"

Timur Dzhatdov (Moscow State Univ.)

15:30-16:00 (25+5)

"Synergy between Japanese VLBI Network  
and high-energy astrophysics in the Era of Multi-Messenger Astronomy"

Kotaro Niinuma (Yamaguchi Univ.)

Session 5: GRBs in the CTA Era

16:00-16:45 (45)

"GRB studies with the Cherenkov Telescope Array"

Francesco Longo (Univ. of Trieste & INFN, Trieste)

Thierry Stolarczyk (CEA Saclay)

16:45-16:55 (10) Discussions on GRBs

16:55 Closing