

**Hands-on the Extreme
Universe with High Energy
Gamma-ray data**

Report of Contributions

Contribution ID: 1

Type: **not specified**

The Fermi view of the High Energy sky

Monday, 18 July 2022 10:00 (30 minutes)

Presenter: PRINCIPE, Giacomo (Istituto Nazionale di Fisica Nucleare)

Session Classification: The Extreme Universe

Contribution ID: 2

Type: **not specified**

From the current IACT to CTA

Monday, 18 July 2022 10:30 (30 minutes)

Presenter: HOFMANN, Werner

Session Classification: The Extreme Universe

Contribution ID: 3

Type: **not specified**

Ground-based gamma-ray astronomy with LHAASO

Monday, 18 July 2022 11:30 (30 minutes)

Presenter: DI SCIASCIO, Giuseppe (Istituto Nazionale di Fisica Nucleare)

Session Classification: The Extreme Universe

Contribution ID: 4

Type: **not specified**

Science with the Cherenkov Telescope Array Observatory: a general introduction

Monday, 18 July 2022 12:00 (30 minutes)

Presenter: LONGO, Francesco (Istituto Nazionale di Fisica Nucleare)

Session Classification: The Extreme Universe

Contribution ID: 5

Type: **not specified**

Introduction to the ASTRI Science goals

Monday, 18 July 2022 12:30 (30 minutes)

Presenter: GIULIANI, Andrea (INAF / IASF Milano)

Session Classification: The Extreme Universe

Contribution ID: 6

Type: **not specified**

The CTA LST Project and Science

Monday, 18 July 2022 15:00 (30 minutes)

Presenter: TESHIMA, Masahiro (Max-Planck-Institute)

Session Classification: Next Generation IACT telescopes

Contribution ID: 7

Type: **not specified**

Medium Sized Telescopes for the Cherenkov Telescope Array

Monday, 18 July 2022 15:30 (30 minutes)

Presenter: GLICENSTEIN, Jean-Francois

Session Classification: Next Generation IACT telescopes

Contribution ID: 8

Type: **not specified**

The prototype Schwarzschild Couder Telescope: a Medium-Sized Telescope for the Cherenkov Telescope Array

Monday, 18 July 2022 16:30 (30 minutes)

Presenter: BISSALDI, Elisabetta (Istituto Nazionale di Fisica Nucleare)

Session Classification: Next Generation IACT telescopes

Contribution ID: 9

Type: **not specified**

The development of ASTRI telescopes from ASTRI-HORN prototype to ASTRI-Mini Array and CTA-SST

Monday, 18 July 2022 17:00 (30 minutes)

Presenter: SIRONI, Giorgia

Session Classification: Next Generation IACT telescopes

Contribution ID: **10**

Type: **not specified**

Introduction to Gammapy

Monday, 18 July 2022 17:30 (30 minutes)

Presenter: RODRIGUEZ FERNANDEZ, Gonzalo

Session Classification: Next Generation IACT telescopes

Contribution ID: 11

Type: **not specified**

UHECR propagation in the extragalactic space

Tuesday, 19 July 2022 09:00 (45 minutes)

Presenter: BONCIOLI, Denise (GSSI)

Session Classification: Theory of VHE sources

Contribution ID: 12

Type: **not specified**

Emission processes in Blazars

Tuesday, 19 July 2022 09:45 (45 minutes)

Presenter: TAVECCHIO, Fabrizio (INAF-)AB)

Session Classification: Theory of VHE sources

Contribution ID: 13

Type: **not specified**

High Energy processes in GRB

Tuesday, 19 July 2022 10:30 (45 minutes)

Presenter: MICELI, Davide (Istituto Nazionale di Fisica Nucleare)

Session Classification: Theory of VHE sources

Contribution ID: 14

Type: **not specified**

From Pulsar to PWNe

Tuesday, 19 July 2022 11:45 (45 minutes)

Presenter: MORLINO, Giovanni (INAF/Oss. Astrofisico di Arcetri)

Session Classification: Theory of VHE sources

Contribution ID: 15

Type: **not specified**

ALPs and polarisation

Tuesday, 19 July 2022 12:30 (45 minutes)

Presenter: GALANTI, Giorgio (INAF, Osservatorio Astronomico di Brera)

Session Classification: Theory of VHE sources

Contribution ID: 16

Type: **not specified**

The Communication as a bridge between Science and Society

Tuesday, 19 July 2022 15:00 (1 hour)

Presenter: SPIGA, Rossella (Department of Physics and Astronomy - UNIPD)

Session Classification: Tutorials

Contribution ID: 17

Type: **not specified**

Tutorial on gammapy for CTAO

Tuesday, 19 July 2022 16:30 (2 hours)

Session Classification: Tutorials

Contribution ID: **18**

Type: **not specified**

Multimessenger searches of transient sources with Cherenkov telescopes

Wednesday, 20 July 2022 09:00 (30 minutes)

Presenter: BERTI, Alessio (TO)

Session Classification: Science with Cherenkov Telescopes

Contribution ID: 19

Type: **not specified**

Dark Matter searches with the Cherenkov Telescope Array Observatory

Wednesday, 20 July 2022 09:30 (30 minutes)

Presenter: MORSELLI, Aldo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Science with Cherenkov Telescopes

Contribution ID: 20

Type: **not specified**

The extragalactic TeV sky: past, present, and future

Wednesday, 20 July 2022 10:00 (30 minutes)

Presenter: PRANDINI, Elisa (University of Padova and INFN)

Session Classification: Science with Cherenkov Telescopes

Contribution ID: 21

Type: **not specified**

The fascinating Galactic Science to understand with future Cherenkov Telescopes

Wednesday, 20 July 2022 11:00 (30 minutes)

Presenter: CARDILLO, Martina (INAF-IAPS & Università di Roma Tor Vergata)

Session Classification: Science with Cherenkov Telescopes

Contribution ID: 22

Type: **not specified**

Pevatron searches

Wednesday, 20 July 2022 11:30 (30 minutes)

Presenter: MORLINO, Giovanni (INAF/Oss. Astrofisico di Arcetri)

Session Classification: Science with Cherenkov Telescopes

Contribution ID: 23

Type: **not specified**

CTAO Data Challenge

Wednesday, 20 July 2022 12:00 (30 minutes)

Presenter: PINTORE, Fabio

Session Classification: Science with Cherenkov Telescopes

Contribution ID: 24

Type: **not specified**

Study of periodicity in Blazar light curves observed by Fermi LAT

Thursday, 21 July 2022 12:40 (20 minutes)

Presenter: CRISTARELLA ORESTANO, Paolo

Session Classification: Participants Contributions

Contribution ID: 25

Type: **not specified**

Simulations of relativistic jets and recollimation in extreme blazars

Wednesday, 20 July 2022 12:40 (20 minutes)

Presenter: COSTA, Agnese (INAF - OA Brera, Università degli Studi dell'Insubria)

Session Classification: Participants Contributions

Contribution ID: 26

Type: **not specified**

Extreme TeV Blazars: a phenomenological model

Wednesday, 20 July 2022 13:00 (20 minutes)

Presenter: SCIACCALUGA, Alberto

Session Classification: Participants Contributions

Contribution ID: 27

Type: **not specified**

From Science to Society: a fruitful path

Wednesday, 20 July 2022 15:30 (30 minutes)

Presenter: GIORDANO, Francesco (BA)

Session Classification: Tutorials

Contribution ID: 28

Type: **not specified**

Tutorial on gammapy for CTAO

Wednesday, 20 July 2022 16:30 (2 hours)

Session Classification: Tutorials

Contribution ID: 29

Type: **not specified**

eRosita

Thursday, 21 July 2022 09:00 (30 minutes)

Presenter: WILMS, Joern

Session Classification: Multiwavelength and MultiMessenger connections

Contribution ID: **30**

Type: **not specified**

The Imaging X-Ray Polarimetry Explorer

Thursday, 21 July 2022 09:30 (30 minutes)

Presenter: COSTA, Enrico (INAF)

Session Classification: Multiwavelength and MultiMessenger connections

Contribution ID: **31**

Type: **not specified**

Synergies with radio and the Square Kilometre Array Observatory

Thursday, 21 July 2022 10:00 (30 minutes)

Presenter: GIROLETTI, Marcello (INAF Istituto di Radioastronomia)

Session Classification: Multiwavelength and MultiMessenger connections

Contribution ID: 32

Type: **not specified**

Astrophysical Neutrinos

Thursday, 21 July 2022 11:00 (30 minutes)

Presenter: KULIKOVSKIY, Vladimir (Istituto Nazionale di Fisica Nucleare)

Session Classification: Multiwavelength and MultiMessenger connections

Contribution ID: 33

Type: **not specified**

Gravitational waves and their role in multimessenger astrophysics

Thursday, 21 July 2022 11:30 (30 minutes)

Presenter: SORRENTINO, Nunziato (University of Pisa and INFN-Pisa)

Session Classification: Multiwavelength and MultiMessenger connections

Contribution ID: 34

Type: **not specified**

Photon-photon interactions, blazar spectral anomalies, and constraints on photon-ALP mixing

Thursday, 21 July 2022 12:00 (20 minutes)

Presenter: FRANCESCHINI, Alberto (P)

Session Classification: Participants Contributions

Contribution ID: 36

Type: **not specified**

Using Deep Learning to Search for Fermi-LAT Point Sources

Thursday, 21 July 2022 12:20 (20 minutes)

Presenter: BHATTACHARYYA, Saptashwa

Session Classification: Participants Contributions

Contribution ID: 37

Type: **not specified**

Tutorial on gammapy for ASTRI

Thursday, 21 July 2022 15:00 (1 hour)

Session Classification: Tutorials

Contribution ID: **38**

Type: **not specified**

Tutorial on gammapy for ASTRI

Thursday, 21 July 2022 16:30 (2 hours)

Session Classification: Tutorials

Contribution ID: 39

Type: **not specified**

Cosmic-ray propagation under consideration of a spatially resolved source distribution

Friday, 22 July 2022 09:00 (20 minutes)

Presenter: THALER, Julia

Session Classification: Participants Contributions

Contribution ID: 40

Type: **not specified**

Cygnus OB2 as testing ground for particle acceleration at the wind termination shock of massive star clusters

Friday, 22 July 2022 09:20 (20 minutes)

Presenter: MENCHIARI, Stefano (Istituto Nazionale di Fisica Nucleare)

Session Classification: Participants Contributions

Contribution ID: 41

Type: **not specified**

Cosmic Rays origin studies in the W 44 region with Fermi-LAT and MAGIC observation

Friday, 22 July 2022 09:40 (20 minutes)

Presenter: DI TRIA, Riccardo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Participants Contributions

Contribution ID: 42

Type: **not specified**

Participants Case Studies Report

Friday, 22 July 2022 10:30 (1 hour)

Session Classification: Workshop Conclusions

Contribution ID: 43

Type: **not specified**

Workshop Conclusions

Friday, 22 July 2022 12:00 (30 minutes)

Presenters: RIGHI, Chiara (INAF - OABrera); LONGO, Francesco (Istituto Nazionale di Fisica Nucleare); BONNOLI, Giacomo (SI)

Session Classification: Workshop Conclusions

Contribution ID: 44

Type: **not specified**

25 years of GRB afterglows. Lesson learned.

Friday, 22 July 2022 11:30 (30 minutes)

Presenter: COSTA, Enrico (INAF)

Session Classification: Workshop Conclusions