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

Report of Contributions

The Fermi view of the High Energy ...

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

From the current IACT to CTA

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

Ground-based gamma-ray astrono ...

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

Science with the Cherenkov Teles...

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

Introduction to the ASTRI Science ...

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

The CTA LST Project and Science

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

Medium Sized Telescopes for the C ...

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

The prototype Schwarzschild Cou...

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

The development of ASTRI telesco ...

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

Introduction to Gammapy

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

UHECR propagation in the extrag ...

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

Emission processes in Blazars

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

High Energy processes in GRB

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

From Pulsar to PWNe

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

ALPs and polarisation

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

The Communication as a bridge be ...

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

Tutorial on gammapy for CTAO

Contribution ID: 17

Type: not specified

Tutorial on gammapy for CTAO

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

Session Classification: Tutorials

Multimessenger searches of transi...

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

Dark Matter searches with the Ch...

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

The extragalactic TeV sky: past, p...

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

The fascinating Galactic Science to ...

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 & amp; Università di Roma Tor Vergata) **Session Classification:** Science with Cherenkov Telescopes

Pevatron searches

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

CTAO Data Challenge

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

Study of periodicity in Blazar light ...

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

Simulations of relativistic jets and ...

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

Extreme TeV Blazars: a phenomen ...

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

From Science to Society: a fruitful ...

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 Hands-on the Ext $\ldots~$ / Report of Contributions

Tutorial on gammapy for CTAO

Contribution ID: 28

Type: not specified

Tutorial on gammapy for CTAO

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

Session Classification: Tutorials

eRosita

Contribution ID: 29

Type: not specified

eRosita

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

Presenter: WILMS, Joern

Session Classification: Multiwavelength and MultiMessenger connections

The Imaging X-Ray Polarimetry E ...

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

Synergies with radio and the Squa...

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

Astrophysical Neutrinos

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

Gravitational waves and their role ...

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

Hands-on the $\operatorname{Ext}\ldots$ / Report of Contributions

Photon-photon interactions, blaza ...

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

Using Deep Learning to Search for ...

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

Tutorial on gammapy for ASTRI

Contribution ID: 37

Type: not specified

Tutorial on gammapy for ASTRI

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

Session Classification: Tutorials

Tutorial on gammapy for ASTRI

Contribution ID: 38

Type: not specified

Tutorial on gammapy for ASTRI

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

Session Classification: Tutorials

Cosmic-ray propagation under co...

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

Cygnus OB2 as testing ground for ...

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

Cosmic Rays origin studies in the ...

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

Participants Case Studies Report

Contribution ID: 42

Type: not specified

Participants Case Studies Report

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

Session Classification: Workshop Conclusions

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

25 years of GRB afterglows. Lesso ...

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