

**12th Astroparticle Physics  
Science Fair 2025/2026: High  
Energy**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Review on HE Experimental Activities**

*Tuesday, 17 February 2026 10:00 (30 minutes)*

**Presenter:** DE MITRI, Ivan (Gran Sasso Science Institute (GSSI) and INFN)

Contribution ID: 2

Type: **not specified**

## **Review on HE Theoretical activities**

*Tuesday, 17 February 2026 09:30 (30 minutes)*

**Presenter:** ALOISIO, Roberto (Gran Sasso Science Institute)

Contribution ID: 4

Type: **not specified**

## **Suppressed Diffusion and Gamma-Ray Emission from the Cygnus Bubble**

*Tuesday, 17 February 2026 12:05 (5 minutes)*

**Presenter:** LI, Ben (GSSI and INFN)

**Session Classification:** Poster session

Contribution ID: 5

Type: **not specified**

## **Searching for the origin of ultra-high-energy cosmic rays**

*Tuesday, 17 February 2026 11:05 (5 minutes)*

**Presenter:** ANDRADE DOURADO, Luciana (GSSI and INFN-LNGS)

**Session Classification:** Poster session

Contribution ID: 6

Type: **not specified**

## **Inferring properties of Ultra-High-Energy Cosmic Ray sources with Information Field Theory**

*Tuesday, 17 February 2026 12:40 (5 minutes)*

**Presenter:** VAIMAN, Igor (Gran Sasso Science Institute)

**Session Classification:** Poster session

Contribution ID: 7

Type: **not specified**

## **Diffusive Shock Acceleration and Cosmic-Ray Driven Instabilities**

*Tuesday, 17 February 2026 11:30 (5 minutes)*

**Presenter:** CAPANEMA, Antonio (GSSI and INFN)

**Session Classification:** Poster session

Contribution ID: 8

Type: **not specified**

## The Environment of TeV Halo Sources

*Tuesday, 17 February 2026 11:25 (5 minutes)*

**Presenter:** BOURGUINAT, Lioni-Moana (GSSI)

**Session Classification:** Poster session

Contribution ID: 9

Type: **not specified**

## **Multimessenger Studies with the Pierre Auger Observatory**

*Tuesday, 17 February 2026 12:15 (5 minutes)*

**Presenter:** MARINELLI, Costanza (GSSI and INFN)

**Session Classification:** Poster session

Contribution ID: **10**

Type: **not specified**

## **Ultra-High-Energy Messengers as Probes of Physics Beyond the Standard Model**

*Tuesday, 17 February 2026 11:10 (5 minutes)*

**Presenter:** AMBROSONE, Antonio (GSSI and INFN LNGS)

**Session Classification:** Poster session

Contribution ID: 11

Type: **not specified**

## The Galactic Very-High-Energy Sky

*Tuesday, 17 February 2026 11:40 (5 minutes)*

**Presenter:** ESPINOSA CASTRO, Luis Enrique (Gran Sasso Science Institute)

**Session Classification:** Poster session

Contribution ID: 12

Type: **not specified**

## **The Pierre Auger Observatory: a window for the highest-energies in the Universe**

*Tuesday, 17 February 2026 11:35 (5 minutes)*

**Presenter:** CONVENGA, Fabio (GSSI & LNGS)

**Session Classification:** Poster session

Contribution ID: 13

Type: **not specified**

## **The possible contribution of microquasars to the cosmic ray proton "knee"**

*Tuesday, 17 February 2026 12:10 (5 minutes)*

**Presenter:** LOO, Chun Khai (GSSI and INFN)

**Session Classification:** Poster session

Contribution ID: 14

Type: **not specified**

## **HERD space mission: Probing the Galactic Cosmic Ray frontier**

*Tuesday, 17 February 2026 12:00 (5 minutes)*

**Presenters:** KYRATZIS, Dimitrios (Gran Sasso Science Institute (GSSI) and INFN-LNGS); CAGNOLI, Irene (GSSI)

**Session Classification:** Poster session

Contribution ID: 15

Type: **not specified**

## **Terzina on board NUSES: a pathfinder for EAS Cherenkov Light Detection from space**

*Tuesday, 17 February 2026 12:20 (5 minutes)*

**Presenters:** ROY, Abhijit (GSSI and INFN); TORRES SAAVEDRA, Rodrigo Alberto (Gran Sasso Science Institute); TRIMARELLI, Caterina (Università dell'Aquila)

**Session Classification:** Poster session

Contribution ID: 16

Type: **not specified**

## **Sub-Orbital Multi-Messenger Multi-Detector: The Case of POEMMA-Balloon with Radio (PBR)**

*Tuesday, 17 February 2026 12:25 (5 minutes)*

**Presenters:** ROY, Abhijit (GSSI and INFN); TRIMARELLI, Caterina (GSSI and INFN); TRIMARELLI, Caterina (Università dell'Aquila); TORRES SAAVEDRA, Rodrigo Alberto (Gran Sasso Science Institute)

**Session Classification:** Poster session

Contribution ID: 17

Type: **not specified**

## **Crystal Eye: Science with an all-sky monitor in keV-MeV**

*Tuesday, 17 February 2026 12:30 (5 minutes)*

**Presenters:** BAIOCCHI, Melissa (GSSI and INFN); BARBATO, Felicia (GSSI and INFN); CASILLI, Elisabetta (GSSI and INFN); SARKAR, Ritabrata (Gran Sasso Science Institute)

**Session Classification:** Poster session

Contribution ID: **18**

Type: **not specified**

## **SpaceltUp Project: SiPM based detectors for ionizing radiation in space**

*Tuesday, 17 February 2026 12:35 (5 minutes)*

**Presenters:** TRIMARELLI, Caterina (GSSI and INFN); TRIMARELLI, Caterina (Università dell'Aquila)

**Session Classification:** Poster session

Contribution ID: 19

Type: **not specified**

## **The NUSES space mission: enabling new technologies and observation modes**

*Tuesday, 17 February 2026 11:50 (5 minutes)*

**Presenters:** FONTANELLA, Giulio (Gran Sasso Science Institute); SAVINA, Pierpaolo (Gran Sasso Science Institute (GSSI), Via Iacobucci 2, I-67100 L'Aquila, Italy)

**Session Classification:** Poster session

Contribution ID: 20

Type: **not specified**

## **Galactic cosmic rays with 10 years of DAMPE data**

*Tuesday, 17 February 2026 11:45 (5 minutes)*

**Presenters:** CASILLI, Elisabetta (GSSI and INFN); FOGLIACCO, Sara (GSSI)

**Session Classification:** Poster session

Contribution ID: 21

Type: **not specified**

## **The Ziré detector on board of the NUSES mission**

*Tuesday, 17 February 2026 11:15 (5 minutes)*

**Presenters:** ASHUROV, Sindorjon (GSSI and INFN); BAIOCCHI, Melissa (GSSI and INFN); PAT-TANAİK, Diptiranjana (GSSI and INFN)

**Session Classification:** Poster session

Contribution ID: 22

Type: **not specified**

## **Crystal Eye & WINK: Innovating Hardware for the Space Detection of X and Gamma Rays**

*Tuesday, 17 February 2026 11:20 (5 minutes)*

**Presenters:** BARBATO, Felicia (GSSI and INFN); BAIOCCHI, Melissa (GSSI); TAMBONE, Matteo (Gran Sasso Science Institute (GSSI))

**Session Classification:** Poster session

Contribution ID: 23

Type: **not specified**

# UHE particles in the presence of Lorentz Invariance Violation

*Tuesday, 17 February 2026 11:55 (5 minutes)*

**Presenter:** GIAMMARCO, Matteo (University of L'Aquila and INFN-LNGS)

**Session Classification:** Poster session