

## **Session Program**

**14-24 Jul 2025**



## **ICRC 2025 - The Astroparticle Physics Conference**

***SH***

CICG - International Conference Centre - Geneva, Switzerland  
17 rue de Varembé CH - 1211 Geneva Switzerland

## Tuesday 15 July

13:20

### SH: neutron monitors

Session | Location: Room 4

13:20–13:35

#### HLEA and THIMON: Strengthening Neutron Monitor Observations from Haleakalā

##### Speaker

Veronica Bindi

13:35–13:50

#### Cosmic-Ray Spectral Variations during 2007-2025 with Neutron Monitor Time-Delay Measurements at High Cutoff Rigidity

##### Speaker

Chanoknan Banglieng

13:50–14:05

#### Hourly measurements of cosmic-ray spectral variation during Forbush decreases using ground-based neutron and muon detectors

##### Speaker

Warit Mitthumsiri

14:05–14:20

#### Monte Carlo Simulations of Multiple-secondary Cosmic Ray Detection by Neutron Detectors in Mawson Station, Antarctica

##### Speaker

Mehak kanwal

14:20–14:35

#### A Simulation Study of the Response of the Princess Sirindhorn Neutron Monitor and Bare Counters to Solar Neutrons

##### Speaker

Areej kazmi

14:35–14:50

#### Response Functions of a Neutron Monitor from the 2023-24 Latitude Survey Aboard the Araon Icebreaker

##### Speaker

Prof. Waraporn Nuntiyakul

14:50

15:20

### SH: Instrumentation

Session | Location: Room 4

15:20–15:35

#### Observation of the Moon and Sun Shadows with the ALPAQUITA Air Shower Array in Bolivia

##### Speaker

Dr Kazumasa Kawata

15:35–15:50

**Design, Assessment, and Calibration of the Moon-Aiming Thai-Chinese Hodoscope for Observing Cosmic Ray Electrons, Solar Energetic Particles, and Lunar Albedo Ions****Speaker**

Dr Kunlanan Puprasit

15:50–16:05

**Comprehensive Study of the Lunar Energetic Particle Environment with LunPAN****Speaker**

Dr Johannes Hulsman

16:05–16:20

**Technical design of the first Thai Space Consortium Satellite (TSC-1) and Its Polar Orbiting Ion Spectrometer Experiment (POISE) Payload****Speaker**

Sunruthai Burom

16:20–16:36

**Advancing Solar and Heliospheric Studies with the CSES Programme****Speaker**

Roberto Iuppa

16:36

## Wednesday 16 July

13:20

### SH: Solar modulation

Session | Location: Room 4

13:20–13:35

#### Cosmic-ray modulation over the past 10 years observed with CALET on the International Space Station

##### Speaker

Shoko Miyake

13:35–13:50

#### Precision Measurement of Daily Proton and Helium Fluxes by the Alpha Magnetic Spectrometer

##### Speaker

Francesco Faldi

13:50–14:05

#### Study of Forbush decrease in Cosmic-Ray Electron plus Positron events detected with DAMPE

##### Speaker

Wenhao Li

14:05–14:20

#### The Sun-Earth environment between the 24th and 25th solar cycles: observations and results from the High-Energy Particle Detector (HEPD-01) onboard the CSES-01 satellite

##### Speaker

Matteo Martucci

14:20–14:35

#### Surprising Variation of Gamma Rays from the Sun over the Solar Cycle Revealed with Fermi

##### Speaker

Silvia RAINO'

14:35–14:50

#### Study the relationship between Galactic Cosmic Rays' 27 day recurrent variation and Corotating Interaction Region

##### Speaker

Xi Luo

14:50

15:20

### SH: Solar modulation

Session | Location: Room 4

15:20–15:35

#### Multi-spacecraft observations of the 27-day periodicity in galactic protons from 2018 to 2019 by the HEPD-01 detector on board the CSES-01 satellite and other experiments

**Speaker**

Francesco Palma

15:35–15:50

**Hourly cadence cosmic ray modulation parameter  $\phi$  at first glance: Challenges and possibilities****Speaker**

Pauli Kalervo Vaisanen

15:50–16:05

**Solar modulation of cosmic ray electron and positron flux up to 15 GeV measured with DAMPE****Speaker**

Dr Yang Liu

16:05–16:20

**COSMICA: A GPU-Optimized Code for Solar Modulation Studies****Speaker**

Stefano Della Torre

16:20–16:35

**A modelling study of the solar modulation of galactic protons at lower energies over changing solar activity****Speaker**

Dzivhuluwani Ndiitwani

16:35

17:05

**SH: stars and planets****Session** | **Location:** Room 4

17:05–17:20

**Cosmogenic  $^{10}\text{Be}$  as a tracer of cosmic-ray variability: Atmospheric transport model and its parameterisation****Speaker**

Ilya Usoskin

17:20–17:35

**Measurement of the neutron spectrum and dose in the SAA region during strong solar activity episodes by the SAMADHA experiment****Speaker**

Dr Carlo Francesco Vigorito

17:35–17:50

**Galactic cosmic ray fluxes during the lifetime of a red dwarf star****Speaker**

Donna Rodgers-Lee

17:50–18:05

**Solar Neutrino Data v.s. Standard Core Physics: Reconciling CNO Flux Anomalies via Opacity and Key Nuclear Cross-Section Revisions****Speaker**

Prof. Yufeng Li

18:05–18:21

**The Influence of SEPs and Cosmic Rays on the Early Earth Atmosphere**

18:21

**Speaker**

Donna Rodgers-Lee

## Thursday 17 July

13:20

### SH: Solar modulation

Session | Location: Room E

13:20–13:35 **Aspects of antiproton modulation in the heliosphere**

**Speaker**

Dr Donald Ngobeni

13:35–13:50

**Rigidity spectrum of cosmic-ray anisotropy observed by Global Muon Detector Network (GMDN)**

**Speaker**

Masayoshi Kozai

13:50–14:05

**Scaler data from the Pierre Auger Observatory as a proxy of solar activity**

**Speaker**

Prof. Carla Taricco

14:05–14:20

**Modeling the heliospheric modulation of cosmic-ray particles and antiparticles in light of new multichannel data from AMS-02 in space.**

**Speaker**

Nicola Tomassetti

14:20

15:20

### SH: heliosphere

Session | Location: Room E

15:20–15:35

**A 3D Monte Carlo calculation of the inverse Compton emission from the Sun and stars in presence of magnetic and electric fields**

**Speaker**

Nicola Mazziotta

15:35–15:50

**The numerical simulation of the Interplanetary Radiation Environment induced by Galactic Cosmic Rays**

**Speaker**

Xi Luo

15:50–16:05

**New constraints in modelling galactic deuterons in the heliosphere**

**Speaker**

Innocentia Itumeleng Ramokgaba

16:05–16:20

**Negative and positive electric charge flows through the solar system based on the Voyager data**

**Speaker**

Prof. Antonio Codino

16:20–16:35

**Stochastic Simulation of Galactic Cosmic-Rays in the Trapped Region beyond Heliopause****Speaker**

XiaoCheng Guo

16:35–16:50

**Local Time Variation of Interplanetary Scintillations****Speaker**

Prof. Paul Evenson

16:50

## Friday 18 July

13:20

### SH: energetic events

Session | Location: Room E

13:20–13:35

#### Extreme Solar Energetic Particles Events measured by the Alpha Magnetic Spectrometer.

##### Speaker

Cristina Consolandi

13:35–13:50

#### Survey of Fe-rich SEP events observed by Parker Solar Probe/Integrated Science Investigation of the Sun

##### Speaker

Christina Cohen

13:50–14:05

#### Active regions with super-productivity in Solar Energetic Particles

##### Speaker

Silvia Dalla

14:05–14:20

#### Observations and simulations of decay phases of Solar Energetic Particle events

##### Speaker

Ruth Hyndman

14:20–14:35

#### Study of solar activity with AERA at the Pierre Auger Observatory

##### Speaker

Rogerio Menezes

14:35–14:50

#### Observations of Solar Gamma-Ray Flares by ISOIS/EPI-Hi/HET on Parker Solar Probe

##### Speaker

Richard Leske

14:50

15:20

### SH: energetic events

Session | Location: Room E

15:20–15:35

#### On the effect of turbulence on large-scale drifts of solar energetic particles

##### Speaker

Timo Laitinen

15:35–15:50

#### Solar event of May 11, 2024 some conclusions on the behavior of cosmic rays

##### Speaker

Prof. Juan José Blanco Ávalos

15:50–16:05

**In-depth analysis of selected major solar events with the HEPP-L particle detector onboard CSES-01 in low-Earth orbit****Speaker**

Alessio Perinelli

16:05–16:20

**Are extreme solar particle events and superflares related? A probabilistic view****Speaker**

Sergey Koldobskiy

16:20–16:35

**Ion-rich acceleration during an eruptive flux rope event in a multiple null-point configuration****Speaker**

Melissa Pesce-Rollins

16:35–16:50

**Solar Energetic Electron Events with a Spectral Bump Break****Speaker**

Linghua Wang

16:50

17:05

**SH: energetic events****Session** | **Location:** Room E

17:05–17:20

**Simultaneous Simulation of the Solar Energetic Protons and the Forbush Decrease in Galactic Cosmic Ray Flux Following the 14 July 2017 Event****Speaker**

Dr Igor Sokolov

17:20–17:35

**Using Monte Carlo Simulation to Study the Pile-up Effect of CME and CIR-driven Shocks****Speaker**

Xin Wang

17:35–17:50

**Over-abundant gamma-like signals around Solar disk by smeared and bent electron pairs spiral secondaries feeding TeV gamma by ICS****Speaker**

Daniele Fargion

17:50–18:05

**Spectra and anisotropy during GLE 74 on 11 May 2024 derived using neutron monitor data****Speaker**

Alexander Mishev

18:05–18:21

**From Sun to ground: Particle Acceleration and transport in the inner heliosphere****Speaker**

Prof. Gang Li

18:21