## **Session Program**

10-14 Jan 2022

# **XXVIII Cracow EPIPHANY Conference on Recent Advances in Astroparticle Physics**

# Young Scientists' Session

IFJ PAN Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences (IFJ PAN), 152 Radzikowskiego Street, Cracow, Poland

## Friday 14 January

### 13:15

### Young Scientists' Session: Cosmic ray acceleration

### Session |

Location: IFJ PAN, Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences (IFJ PAN), 152 Radzikowskiego Street, Cracow, Poland Convener: Alicja Wierzcholska

### 13:15-13:25

### Numerical study of orbital and statistical behaviors of galactic cosmic rays invading into the heliosphere

### Speaker

Kotaro Yoshida

### Galactic magnetars as transient ultra high energy cosmic ray sources 13:25-13:35

Speaker

Vadym Voitsekhovskyi

13:35-13:45 Cosmic rays acceleration in SN 1006

Speaker

Roberta Giuffrida

### 13:45-13:55

### A spatially resolved study of hard X-ray emission in Kepler's SNR: indications of different regimes of particle acceleration

Speaker Vincenzo Sapienza

### 13:55-14:05

### PIC simulations of SNR's shock waves with a turbulent upstream medium

Speaker

Karol Fułat

### 14:05-14:15

Hydrodynamics and radiation from colliding pulsar and stellar winds in a highmass binary system

Speaker Gabriel Torralba Paz

### 14:15-14:25

### Jump Conditions for a Relativistic Shock Propagating in a Resistive Medium

Speaker

**Argyrios Loules** 

### 14:25-14:35

Stability analysis of relativistic magnetised astrophysical jets: a hyper-unstable solution

Speaker

**Charalampos Sinnis**