



**FZU**

Institute of Physics  
of the Czech  
Academy of Sciences

## Invitation

to the seminar of Division of Elementary Particle Physics of the  
Institute of Physics of the Czech Academy of Sciences



**Jakub Juryšek**

Institute of Physics  
of the Czech Academy of Sciences

## Multi-wavelength study of the galactic PeVatron candidate LHAASO J2108+5157

**Abstract:** The Cherenkov Telescope Array (CTA) Observatory will be the next generation ground-based very-high-energy gamma-ray observatory, sensitive from 20 GeV up to 300 TeV. The Large-Sized Telescope prototype (LST-1), currently in the commissioning phase, was inaugurated in October 2018 on La Palma (Spain). It is the first of four LST telescopes for CTA, to be built on La Palma. In 2021, LST-1 performed observations of one of the Galactic PeVatron candidates, LHAASO J2108+5157, recently discovered by the LHAASO collaboration. Two molecular clouds identified in the direction towards LHAASO J2108+5157 make the source a promising Galactic PeVatron candidate. I will present results of our analysis of the LST-1 data, putting strong constraints on the emission of the source in the multi-TeV band. I will also present results of multi-wavelength modeling of data from various instruments and discuss possible scenarios for the high energy emission of the source.

**When:** Thursday, March 23, 2023 at 2PM

**Where:** Main conference hall, Institute of Physics, Na Slovance 2, Prague 8

For more information, please see <https://indico.fzu.cz/event/130/>