Contribution ID: 65 Contribution code: INSTR/SW

Type: Oral

Observation of Astrophysical Sources with SST-1M Telescopes - First Results

Wednesday 4 September 2024 14:30 (15 minutes)

The Single-Mirror Small Size Cherenkov Telescope (SST-1M) was developed by a consortium of institutes in Switzerland, Poland, and the Czech Republic. The SST-1M design is based on the Davies-Cotton concept, featuring a 4-meter mirror and an innovative SiPM-based camera. It is most sensitive to gamma rays in the TeV and multi-TeV energy bands. Since 2021, two SST-1M prototypes have been commissioned at the Ondřejov Observatory in the Czech Republic, where their performance in both mono and stereo observation modes is being tested. During the commissioning phase, several galactic and extragalactic gamma-ray sources have been observed, resulting in multiple detections. In this contribution, we present preliminary results from this observation campaign, focusing on the validation of SST-1M performance based on observations of the Crab Nebula, and discuss future prospects. Additionally, we introduce the data analysis pipeline, sst1mpipe, which is being developed for SST-1M event reconstruction.

Primary author: JURYSEK, Jakub (FZU - Institute of Physics of Czech Academy of Sciences)

Co-author: THE SST-1M COLLABORATION

Presenter: JURYSEK, Jakub (FZU - Institute of Physics of Czech Academy of Sciences)

Session Classification: Parallel 2