Contribution ID: **88** Type: **Oral presentation**

Preliminary results for helium flux measured by the High-Energy Particle Detector (HEPD) on board the CSES-01 satellite

Wednesday, 14 September 2022 17:10 (20 minutes)

The High-Energy Particle Detector (HEPD) is one of the payloads on board of CSES01, the China Seismo-Electromagnetic Satellite dedicated to monitoring perturbations of electromagnetic fields, plasma and charged particle fluxes induced by natural sources and artificial emitters in the near-Earth space. It is a light and compact payload suitable for measuring electrons (3-100 MeV), protons (30-300 MeV), and light nuclei (up to a few hundreds of MeV) with a high energy resolution and a wide angular acceptance. It has been launched in February 2018 on a Low-Earth Orbit and an altitude of about 507 km with a foreseen mission lifetime of over 5 years. It is providing crucial new insight in the physical dynamics of the radiation belts in the Earth's magnetosphere. In this work, a preliminary analysis on helium spectra with energy > 60 MeV is presented.

Primary authors: SOTGIU, Alessandro (ROMA2); PANICO, Beatrice (Istituto Nazionale di Fisica Nucleare)

Presenter: PANICO, Beatrice (Istituto Nazionale di Fisica Nucleare)

Session Classification: Cosmic Rays