Contribution ID: **55** Type: **Invited talk**

Recent Results and Dark Matter Search with CALET on the ISS

Wednesday, 13 November 2019 13:30 (30 minutes)

The CALorimetric Electron Telescope (CALET), which is currently conducting direct cosmic-ray observations onboard the International Space Station (ISS), uses an all-calorimetric instrument with total vertical thickness of 30 radiation lengths and fine imaging capability. The instrument is optimized for cosmic-ray electron measurements by achieving large proton rejection and excellent energy resolution well into the TeV energy region. In addition, very wide dynamic range of energy measurements and absolute charge identification capability of the instrument enable us to measure proton and nuclei spectra as well as electron and gamma-ray spectra. The CALET mission goals include the investigation of acceleration and propagation of galactic cosmic rays, of possible nearby sources, and of potential signature of dark matter. Since the start of observation in October 2015, smooth and continuous operations have taken place. In this talk, we will give a brief summary of the recent results obtained with CALET and discuss about the dark matter search using the CALET all-electron spectrum.

Affiliation

WISE, Waseda University

Primary author: ASAOKA, Yoichi (WISE, Waseda University)

Presenter: ASAOKA, Yoichi (WISE, Waseda University)

Session Classification: Focused Session: Charged particles