

Abstract Submitted
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Overview of CALET Results from Five Years of Observations on the ISS NICHOLAS CANNADY, University of Maryland, Baltimore County, CALET COLLABORATION — The Calorimetric Electron Telescope (CALET) is a high-energy cosmic ray and gamma ray detector on the International Space Station. CALET was launched in August 2015 and installed on the Japanese Experiment Module Exposed Facility and has continued stable data acquisition since soon thereafter. The main instrument is an electromagnetic calorimeter with normal-incidence depth of 30 radiation lengths, comprising a plastic scintillating paddle charge detector, an alternating plastic scintillating fiber-tungsten sheet imaging calorimeter, and a lead tungstate total absorption calorimeter. The calorimeter is sensitive to cosmic-ray electrons (and positrons) and gamma rays from 1 GeV to beyond 10 TeV and cosmic-ray hadrons up to PeV total energies. Using data obtained over 5 years of operation, we will briefly summarize results from CALET observations, including the all-electron (electron+positron) energy spectrum, energy spectra of cosmic-ray nuclei, abundances of ultra-heavy cosmic-ray nuclei, and observations of transient and persistent sources of gamma rays.

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