

New results obtained from CALET observations after 8 years of data collection on the International Space Station

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The Calorimetric Electron Telescope (CALET) is a cosmic-ray observatory operating since October 2015 on the International Space Station. The primary scientific goals of the CALET mission include the investigation of the mechanism of cosmic-ray acceleration and propagation in the Galaxy and the detection of potential nearby sources of high-energy electrons and potential dark matter signatures. The CALET instrument can measure the inclusive spectrum of cosmic electrons and positrons up to about 20 TeV. In addition, it can measure the energy spectra and elemental composition of cosmic-ray nuclei from H to Fe and the abundance of trans-iron elements up to about 1 PeV. Finally, it can monitor the gamma-ray sky up to about 10 TeV, search for signals from gravitational-wave event candidates, and observe gamma-ray burst events. In this contribution the on-orbit performance of the instrument and the main results obtained during the first 8 years of operation will be reported and discussed.

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