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## Performance of the AMS-02 Electromagnetic Calorimeter in Space

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The Alpha Magnetic Spectrometer (AMS-02) is a high-energy particle detector deployed on the International Space Station (ISS) since May 19, 2011 to conduct a long-duration mission on fundamental physics research in space. The main scientific goals of the mission are the detection of antimatter and dark matter through the study of the spectra and fluxes of protons, electrons, nuclei until the iron, their antiparticles, and gamma-rays in the GeV to TeV energy range. The Electromagnetic CALorimeter (ECAL) is required to measure  $e^+$ ,  $e^-$  and gamma spectra and to discriminate electromagnetic showers from hadronic cascades. To fulfill these requirements the ECAL is based on a lead/scintillating fiber sandwich, providing a 3 Dimensional imaging reconstruction of the showers. The high granularity consists of 18 samplings in the longitudinal direction, and 72 samplings in the lateral direction. Measurements of ECAL parameters in space and performance in term of energy and angular resolutions, linearity, proton rejections will be reviewed.

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