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CALET - The CALorimetric Electron Telescope for the International Space Station¹ MICHAEL L. CHERRY, Dept. of Physics and Astronomy, Louisiana State University, FOR THE CALET COLLABORATION — The CALET space experiment, currently under development by a Japanese-Italian-US collaboration, will measure the flux of cosmic ray electrons and positrons to 20 TeV, gamma rays to 10 TeV, and nuclei with Z=1 to 40 up to 1,000 TeV during a five year mission. CALET will provide information on possible nearby astrophysical sources of high energy electrons, study the details of galactic particle propagation and search for dark matter signatures. The instrument consists of a particle charge identification module, a thin (3 radiation lengths) imaging calorimeter with tungsten plates and interleaved scintillating fiber planes, and a thick (27 radiation lengths) lead tungstate calorimeter. CALET has the depth, imaging capability, and energy resolution necessary for excellent separation of hadrons, electrons and gamma rays. The instrument is currently being prepared for launch and installation by the end of 2014 on the Japanese Experiment Module - Exposed Facility (JEM-EF) on the International Space Station (ISS).

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