

A SILICON-TUNGSTEN IMAGING CALORIMETER FOR HIGH ENERGY ELECTRON INVESTIGATIONS

U. Bravar (1), M. Boezio (2), V. Bonvicini (2), T. Harrison (3), S. Mares (4), A. Moiseev (5), J.F. Ormes (5), P. Picozza (6), M. Ricci (7), S.J. Stochaj (1), A. Vacchi (2), W.R. Webber (3)

(1) R.L. Golden Particle Astrophysics Laboratory, New Mexico State University, Las Cruces, NM, USA, (2) Dipartimento di Fisica dell'Università and Sezione INFN di Trieste, Trieste, Italy, (3) Department of Astronomy, New Mexico State University, Las Cruces, NM, USA, (4) Physical Science Laboratory, New Mexico State University, Las Cruces, NM, USA, (5) NASA/Goddard Space Flight Center, Greenbelt, MD, USA, (6) Dipartimento di Fisica dell'Università and Sezione INFN di Roma Tor Vergata, Roma, Italy, (7) Laboratori Nazionali INFN, Frascati, Italy
ubravar@nmsu.edu, stochaj@nmsu.edu

The Electron Observatory (ELO) is a Silicon Tungsten (Si-W) imaging calorimeter concept that has its origin in the Si-W detectors built by the WiZard collaboration for cosmic ray observations from space. It is specifically designed to measure the cosmic ray electron spectrum up to an energy of 10 TeV and search for flux anisotropies at these energies. We present an in-depth analysis of this project, of its simulated performance and plans for future implementation.