COSMIC RAY ENERGETICS AND MASS: CONFIGURATION AND PROGRESS ON CONSTRUCTION AND TESTING

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CREAM (Cosmic Ray Energetics And Mass) is an experiment being constructed to study high-energy cosmic rays from 1 TeV to 1 PeV using the new ultra long duration balloon (ULDB) capability under development by NASA. ULDB flights are designed to last from 60 to 100 days each. CREAM will include a sampling tungsten/scintillating-fiber calorimeter, a transition radiation detector and a timing-based charge detector. We will detail the configuration expected to start flying in December 2003, and report on the status of instrument construction and testing, including sub-system environmental tests.