

Cosmic Ray Muon Experiments

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This setup uses the TeachSpin cosmic ray muon detector with a CAEN “streaming readout” digitizer to detect cosmic rays, measure their energy deposition in the detector. You will also observe the decay of muons to electrons, and measure the mean life of the decay and the energy spectrum of the electrons.

One aspect of this experiment is for you to write a Monte Carlo simulation of muons passing through the detector, and comparing the energy deposition distribution between simulation and measurement.