Abstract

UH Manoa’s High Energy Physics Group Instrumentation Development Lab is developing particle detection system for groundbreaking physics research. They are involved in several international initiatives that require highly specialized devices. Due to this, they often must travel overseas to onsite facilities to evaluate their new devices. The high cost and limited availability of using the facilities motivated the lab to build a local facility for evaluating their devices. The Hawaii Muon Beamline is a testbed for new particle detectors being developed inside the lab. It features several particle detectors whose measurements are used as benchmarks for newer detectors. This report focuses on the work done on the Scintillating Tracker Planes during the 2018 to 2019 school year. Updates to the data acquisition electronics are made to improve reliability and performance.