Development of Muon Veto System for 185-kg NaI[Tl] Detector
ABASI BROWN, NC Central University, COHERENT COLLABORATION — A 185-kg sodium iodide (NaI[Tl]) scintillating detector has been deployed to the basement of the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory in order to observe, and measure, the cross-section of charged-current neutrino interactions on I-137. Muons are expected to be the predominate source of background for charge-current interactions at the energy scale of neutrinos produced by the SNS. A muon veto system has been developed to reduce background, and will be deployed in the fall. Details regarding the hardware and software for the muon veto system will be discussed.