

Abstract Submitted
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Installation of a simple muon veto for HPGe low background counting at the LBNL Low Background Facility¹ KEENAN THOMAS, ERICK NORMAN, UC Berkeley, Dept. of Nuclear Engineering, ALAN SMITH, YUEN-DAT CHAN, Lawrence Berkeley National Laboratory, Nuclear Science Division — The Low Background Facility (LBF) at the Lawrence Berkeley National Laboratory (LBNL) performs low level counting of primordial radioisotope concentrations (U, Th, K) and neutron activation analysis for a variety of experiments and users. Many materials characterized at the facility are candidate construction materials for underground, low background experiments which require high standards of radio-purity within detector components. At the LBF, HPGe detectors are used at two unique sites to perform gamma assay: a local low background surface lab at LBNL and an underground site (600 ft. overburden) in Oroville, CA. Since the primary limitation in sensitivity at the surface location is presented by cosmic ray muons, a simple plastic scintillator system has been installed above a HPGe detector as a veto to lower the background continuum due to these events. This talk will summarize the installation and improvement of the system due to this upgrade and provide a general overview of the services that are available at the Low Background Facility.

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