Abstract Submitted
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Low Background Counting at the 4850L of the Stanford Underground Research Facility (SURF) JASON GOON, DONGMING MEI, DANA BRYAM, MITCHELL WAGNER, WENZHAO WEI, University of South Dakota, YUEN-DAT CHAN, KEVIN LESKO, KEENAN THOMAS, LBNL — Future generation of rare-event experiments require the use of material with unprecedented radio-purity. A low-background counting (LBC) facility has been established at the 4850L (Davis Campus) of SURF to perform initial radio-assay for material and detector parts with respect to the activity of 238U and 232Th decay chains, 40K and cosmic-ray induced isotopes. This facility currently consists of a single commercial low-background high purity germanium (HPGe) detector with the best cosmic-ray shield in the USA. This talk describes the facility, detector systems, calibration, analysis techniques and selected assay results. This research is supported by PHYS-0758120 and PHYS-0919278 and The South Dakota governor's research center - CUBED.

Tuck Goon
University of South Dakota

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