

Low Background Counting Techniques At SNOLAB

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Many of the experiments currently searching for dark matter, studying properties of neutrinos or searching for neutrinoless double beta decay require very low levels of radioactive backgrounds both in their own construction materials and in the surrounding environment. These low background levels are required so that the experiments can achieve the required sensitivities for their searches. SNOLAB has several facilities which are used to directly measure these radioactive backgrounds. This presentation will describe SNOLAB's High Purity Germanium Detectors, one of which has been in continuous use for the past seven years measuring materials for many experiments in operation or under construction at SNOLAB. A description of the characterisation of SNOLAB's new germanium well detector will be given. In addition, brief descriptions of SNOLAB's alpha-beta and electrostatic counters will be presented, and the radon levels at SNOLAB will be discussed.

Summary

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