


Contribution ID: **30** Type: **not specified**

Background radiation measurements for underground experiments performed at UWC and measurements for PAUL

Wednesday 17 January 2024 17:01 (20 minutes)

The physics department at the University of the Western Cape is involved in measurements to limit the background in the planned nEXO experiment. This experiment will look for neutrinoless double beta decay from ^{136}Xe in SNOLAB in Canada.

The background issues involved in underground laboratories namely the natural activity from the surrounding rocks and the radon exhalation from the materials used in underground experiments, will be described in this contribution. Detector systems used for the specialised radon exhalation measurements and the set-ups used at SNOLAB will be briefly described and some results shown.

Some measurements of radon and other parameters in PAUL will also be presented.

Authors: LINDSAY, Robert (University of the Western Cape); MSEBI, Lumkile (University of the Western Cape); NGWADLA, Enkosi (University of the Western Cape)

Presenters: LINDSAY, Robert (University of the Western Cape); MSEBI, Lumkile (University of the Western Cape); NGWADLA, Enkosi (University of the Western Cape)

Session Classification: On PAUL