Contribution ID: **190** Type: **Talk**

The SNOLAB SuperCDMS experiment

Friday 31 March 2023 13:00 (15 minutes)

The SuperCDMS SNOLAB experiment is a direct dark matter (DM) search experiment under construction at the SNOLAB underground laboratory in Sudbury , Canada. It will focus on the search for low mass DM candidates by employing cryogenic Ge and Si detectors, with expected world-leading sensitivity for particles with masses in the range between 0.5 and 5 GeV/c^2. Two types of detectors are employed. The interleaved Z-dependent ionization and phonon (iZIP) detectors, thanks to their background discrimination capability, will be used to push the sensitivity down in cross section. The high voltage (HV) detectors, in which a voltage bias is applied to amplify the ionization signal in the form of phonons, are utilized to explore new regions of mass thanks to their lower energy threshold. In this talk I will present the current status of the experiment installation discussing its discovery potential.

Primary author: MICHIELIN, Emanuele

Presenter: MICHIELIN, Emanuele

Session Classification: SESSION 12: Direct Detection: status of sub-GeV DM detection (CHAIR: Maria Martinez - IUCA - Universidad de Zaragoza)