

Constraining Radon backgrounds in LZ

Thursday, May 25, 2017 10:00 AM (20 minutes)

The Lux-Zeplin (LZ) dark matter detector will be a dual-phase Xe TPC with a 5.6 tonne fiducial volume located at the Sanford Underground Research Facility.

To reduce the background event rate resulting from β -decay of radon decay progeny, LZ has embarked on a comprehensive program to screen detector materials for radon emanation. We will present the status of this screening program, expected radon levels given present screening results, a summary of some recent measurements, and some mitigation strategies.

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