

# Development of the LZ High Voltage Grids

*Saturday, 2 December 2017 11:10 (10 minutes)*

The LZ experiment's hunt for dark matter relies on a set of uniform electric fields to produce measurable signals for WIMP-xenon interactions. To establish these fields, LZ will use four woven mesh high voltage grids set at different heights in the detector. Because of both the large 1.5-meter diameter of these grids and the strong electric fields on the wire surfaces, a considerable amount of R&D is required to ensure that they are built in a way that satisfies LZ's physics goals. This talk will discuss the grid development process and highlight a few of the current R&D efforts for optimizing grid construction and treatment prior to installation into LZ.

## Session

Works in Progress (15+5 min)

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**Session Classification:** Lightning Talks