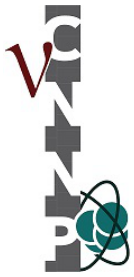

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Dark Matter Direct Detection with Noble Liquids

What is the Dark Matter which makes 85% of the matter in the Universe? We have been asking this question for many decades and used a variety of experimental approaches to address it, with detectors on Earth and in space. Yet, the nature of Dark Matter remains a mystery. An answer to this fundamental question will likely come from ongoing and future searches with accelerators, indirect and direct detection. Detection of a Dark Matter signal in an ultra-low background terrestrial detector will provide the most direct evidence of its existence and will represent a ground-breaking discovery in physics and cosmology. I will review direct detection experiments using noble liquids which have shown the highest sensitivity to-date.

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