## XeSAT2022 - International Workshop on Applications of Noble Gas Xenon to Science and Technology



ID de Contribution: 71 Type: Non spécifié

## Dark Matter Direct Detection with Noble Liquid Detectors

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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. Among the variety of detectors for dark matter direct detection, noble liquid detectors hold the highest potential for discovery thanks to their proven scalability of target mass and superior background reduction capability. To-date, liquid xenon time projection chambers have shown to be the most sensitive, with unprecedented ultra-low background even with targets at the multi-tonne scale. I will present an overview of the ongoing and forthcoming searches based on multi-tonne scale LXe and LAr TPCs worldwide

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