

Contribution ID: 29 Type: not specified

Dark Matter detection with Qubits

Friday, 7 July 2023 12:15 (20 minutes)

Dark Matter searches utilizing single-photon and phonon excitations have been broadly accepted as effective methods of harnessing the miniscule energies transferred from Ultra-light and Light Dark Matter. Qubits are highly sensitive to sub-eV energy phonons and photons which make them a compelling detection technology for light and Ultralight Dark Matter. We will discuss the potential of this novel idea while providing a proof-of-principle demonstration of this technology and an overview of a brand-new R&D program at Fermilab.

Presenter: KHATIWADA, Rakshya

Session Classification: Friday Session 2