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# Backgrounds in Qubits

*Wednesday, June 15, 2022 10:50 AM (20 minutes)*

Quantum devices and light dark matter searches are scientifically active fields. I will discuss the complementarity in technology and research between these two fields. I will discuss recent observations of ionizing radiation backgrounds in leading quantum processors and the insights that can be gained from dark matter searches based on low temperature calorimetry. Extending this observation, environmental sources at low energies interfere with superconducting device performance, and understanding these sources in light dark matter experiments will improve the performance of low temperature superconducting devices. Finally, I will discuss the underground infrastructure involved in this research.

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