

Listening for ultra-heavy dark matter using underwater acoustic sensors

Monday, July 15, 2024 4:30 PM (20 minutes)

Dark matter with masses beyond the Planck scale pose a direct detection challenge given their very low flux. There have been attempts to constrain macroscopic scale dark matter using large volume terrestrial mediums such as the atmosphere, and long integration time mediums such as ancient mica. In this talk, I show that searches of macroscopic dark matter using $\mathcal{O}(100 \text{ km}^3)$ arrays of hydrophones which have been proposed for UHE neutrino detection could probe new parameter space.

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