

Direct search for low mass dark matter with DarkSide-LowMass

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DarkSide-LowMass is a tonne-scale liquid argon time projection chamber being planned by the Global Argon Dark Matter Collaboration (GADMC) to search for WIMP-like dark matter with masses below $10 \text{ GeV}/c^2$, achieving low thresholds with a design optimized for an electron-counting analysis. Building upon the success of DarkSide-50's light dark matter search, DarkSide-LowMass will aim to achieve sensitivity to the solar neutrino floor with a tonne-year exposure. This talk will present sensitivity projections for the DarkSide-LowMass experiment, based on simulations of expected backgrounds.

Reference to paper (DOI or arXiv)

Your gender (free text)

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