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Limits on sub-GeV dark matter from PROSPECT experiment

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If light dark matter gains enough kinetic energy from collision with cosmic rays, it could leave a detectable signal in a neutrino experiment detector. PROSPECT, the PRecision Oscillation and SPECTrum Experiment, is a reactor antineutrino experiment deployed on surface with minimal overburden (< 1 m.w.e). This configuration provides the opportunity to test hard-to-reach regions of dark matter phase space. This talk describes the data analysis of PROSPECT data for a dedicated search of boosted dark matter and present the result.

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