

## Dark Sector Phenomenology at Neutrino Experiments

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Several models of the dark sector beyond the minimal Weakly Interacting Massive Particle paradigm are accessible at current and upcoming neutrino experiments. I present two well-motivated models to which the experiments at Fermilab are sensitive: boosted dark matter and the Higgs portal. Several regions of hadronically interacting boosted dark matter parameter space will be accessible to DUNE. I discuss the detailed phenomenology of the interactions of this dark matter candidate in liquid argon time projection chamber experiments, such as DUNE, including a new Monte Carlo simulation tool. I further explore the sensitivity of the short baseline experiments at Fermilab to light scalars coming from beam-produced mesons. I present projected sensitivities to both models.

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