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Phenomenology of Dark Sectors at the Short Baseline Neutrino Experiments

Thursday, August 4, 2022 2:20 PM (30 minutes)

I discuss predictions for signals of some dark sector models at the Fermilab Short Baseline Neutrino (SBN) experiments. I consider prospects for both inelastic dark matter models and Higgs portal mediator models. I demonstrate that new parameter space for both models can be probed in the near future. I discuss new simulation and analysis strategies, the latter including machine learning techniques, that will be required to realize such searches.

Attendance type

In-person presentation

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