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### **Sub-GeV Dark Matter Searches with Neutrino Detectors at Proton Beam Sources**

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There is overwhelming cosmological evidence that there exists a gravitationally interacting dark matter, yet its microscopic properties remain a mystery. After decades of searching, deep underground detectors have not definitively observed dark matter interactions directly. On the other hand, direct detection experiments do not constrain dark matter models below about a GeV, and there is a rich set of sub-GeV dark matter models that can be directly accessed with accelerators. In one class of models, accelerators produce dark matter via new sub-GeV mediators (e.g., dark photons), and then the dark matter is subsequently detected by large neutrino detectors. The MiniBooNE detector, which ran for a decade measuring short baseline neutrino oscillations, was used in the first dedicated sub-GeV dark matter search with a proton beam in 2014 at Fermilab. An 8-GeV proton beam was directed to a steel beam dump to reduce neutrino backgrounds, and the results of this run will be presented. On the same beam, there are new liquid argon time-projection chambers being built for the short baseline neutrino program, and these new detectors offer exciting opportunities for dark matter searches in future beam dump running. The projected sensitivity of these new detectors will also be discussed.