

# Searching for Light Dark Matter at the Forward Physics Facility

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Light sub-GeV dark matter and dark sector particles can be copiously produced in the far forward direction at the LHC. The proposed FLArE, FASERnu2, and FASER2 experiments, housed in the Forward Physics Facility, can be sensitive to a variety of dark matter scattering and other associated dark sector signatures during the HL-LHC era. This talk will provide an overview of this possibility, including a review of the light dark matter models of interest, the various dark sector signatures, the potential Standard Model backgrounds and mitigation strategies, and the anticipated experimental reach.

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