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Development of the ARGO dark matter experiment

Thursday 10 June 2021 14:30 (10 minutes)

It has long been known that most of the matter in our Universe is dark. The direct detection of dark matter particle interactions is one of the most important topics in particle physics - a positive measurement would provide unambiguous evidence of the particle nature of dark matter in the Universe. In this talk we will present an overview of the phased approach to dark matter searches by the Global Argon Dark Matter Collaboration, including DEAP-3600, Darkside-20k, and an ultimate detector that will employ a 300-tonne sensitive target of liquid argon with sensitivity to the neutrino floor, ARGO. The status of R&D activities in Canada towards ARGO will be presented.

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