

The Outreach and Education program of the Darkside experiment

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The Darkside experiment aims at the direct detection of Dark Matter in the form of Weakly Interacting Massive Particles (WIMPs). It is a 20-tonne (fiducial) argon dual-phase Time-Projection Chamber (TPC) that exploits the cryogenic SiPM technology to identify unambiguously the nuclear recoils induced by WIMPs. The experiment is being installed at the LNGS and will start operation around 2024.

The goal of the Outreach and Education program of Darkside is to disseminate the experiment activity through promotional videos and events addressed to the general public and students. One of our main activities is the DarkSide Masterclass, in which high school students become physicists for a day searching for WIMPs. After a few introductory lectures, the students analyze real data from the precursor DarkSide-50 experiment. Master degree students have access to a more complex version of this Masterclass. Six Masterclass events took place in the last two years, with the participation reaching 400 students in one event. In this talk, we will present the detailed Outreach and Education program of Darkside Collaboration.

Reference to paper (DOI or arXiv)

Your gender (free text)

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