



Contribution ID: 348

Type: **Oral Presentation**

DarkSide-50: status of the detector and results (15' + 5')

Saturday, 6 August 2016 17:35 (20 minutes)

DarkSide-50 is a direct dark matter search experiment operating underground at Laboratori Nazionali del Gran Sasso. It is based on a Time Projection Chamber that contains 50 kg of active argon and it is placed inside an active neutron veto based on a boron-loaded organic scintillator, which is in turn installed inside a water Cherenkov muon veto.

The experiment started acquiring data in Nov 2013 filled with atmospheric argon. In April 2015 it commissioned the low-radioactivity argon from underground sources and has been running in a stable manner since then. We report the current status of the detector and the latest results, including the measurement of the radioactivity of the underground argon and the most sensitive dark matter search performed with an argon target.

Primary author: GUARDINCERRI, Yann (Fermilab)

Presenter: GUARDINCERRI, Yann (Fermilab)

Session Classification: Dark Matter Detection

Track Classification: Dark Matter Detection