



Contribution ID: 362

Type: **Poster**

## The DarkSide Experiment

The DarkSide experiment searches for dark matter with a direct search method using liquid argon as target and using a powerful discrimination method against the background. It is located in the underground Laboratori Nazionali del Gran Sasso (LNGS) and is the new research program worldwide using liquid argon.

The experiment employs a double phase liquid argon Time Projection Chamber (TPC) for the WIMP (Weakly Interacting Massive Particles) search, where two signals are acquired contemporarily after each event: the scintillation signal, produced in the argon itself by the incoming particle, and the ionization signal obtained by the accelerated electrons produced together with argon ions by the same particle.

Here we present the achieved results and the future perspective of such experiment.

### Less than 5 years of experience since completion of Ph.D

N

### Student (Ph.D., M.Sc. or B.Sc.)

N

**Primary author:** Dr RAZETI, Marco (INFN)

**Presenter:** Dr RAZETI, Marco (INFN)