

# Dark Matter Searches in the Sky and Underground

*Thursday, 5 June 2014 14:30 (1 hour)*

The existence of a source of gravitational effects beyond regular matter is well established, but its nature remains a deep mystery.

In principle, Dark Matter particles could be detected either directly, via their interaction on target nuclei, or indirectly, by observing their annihilation in galaxy halos.

Since 2007, tremendous progress has been achieved in both direct and indirect detection efforts.

In this talk, I will review the leading experimental techniques for Dark Matter detection,

both from space-based observatories and from detectors placed underground.

As an example, I will present the results from the Fermi Large Area

Telescope (which was launched in 2008) and from the DarkSide detector (currently taking data at the Gran Sasso Laboratory).

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