

Service de Physique Nucléaire
SÉMINAIRE

Vendredi 11/03/2016, 11h00-12h00

@LIEU

Direct search for WIMP dark matter : results from
EDELWEISS, and global status

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Dark matter is a key ingredient for modern cosmology, but still of unknown nature. Among possible candidates, the WIMP model can be tested by searching for the low-energy nuclear recoils induced by galactic-WIMP-induced elastic scatterings. Several technologies have been proposed to reach this goal. I will present the EDELWEISS detectors and their evolution over time since the end of the 90s. A few results from the last stage of our experiment will be presented, concerning low-mass WIMPs and axion searches. I will then present a global view of the current WIMP direct detection status, both for "high-mass" WIMPs where dual-phase Xenon TPCs have leading sensitivities, and "low-mass" WIMPs for which cryogenic bolometers have recently achieved impressive progress.

Le cafe sera servi 10 minutes avant

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http://irfu.cea.fr/Sphn/Phocea/Vie_des_labos/Seminaires/index.php