

LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

Alfredo Davide Ferella

Zürich University

“The Xenon100 Direct Dark Matter search experiment at Gran Sasso Laboratory”

Abstract

The XENON100 experiment aims to directly detect cold dark matter particles via their elastic collisions with Xenon nuclei. On this purpose a ultra-low background double phase (liquid-gas) xenon filled time projection chamber with a total mass of 170 kg (62 in the target region and 108 kg in the active shield) has been installed at the Gran Sasso Underground Laboratory and is currently taking science data. In this seminar the design and performance of the detector and its associated systems will be presented. Moreover the most recent analysis of 11.2 days of background will be presented along with the results.

APRIL 28, 2010 - 2:30 PM
LNGS - “B. PONTECORVO” ROOM