LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

G. Bellini (INFN Milano)

"Precision measurement of the ⁷Be solar neutrino flux and its day/night asymmetry, and independent validation of the LMA-MSW oscillation solution using Borexino data only"

A new direct measurement of the ⁷Be solar neutrino flux and of the day/night asymmetry in the ⁷Be energy region with a very low total experimental uncertainty, obtained by Borexino, will be presented. In addition it will be discussed how these results provide a unique opportunity to probe and validate the currently favored neutrino oscillation paradigm in the so far untested vacuum regime, having also an important impact on the global best fit of the oscillation parameters.

APRIL 13, 2011 – 3:00 PM LNGS - "E. MAJORANA" ROOM