ID de Contribution: **29** Type: **Ordinary**

Solar-neutrino physics with Borexino

dimanche 4 mars 2012 09:50 (15 minutes)

Borexino is a large-volume liquid scintillator detector installed in the underground halls of the Laboratori Nazionali del Gran Sasso in Italy. After several years of construction, data taking started in May 2007. The Borexino phase I ended after about three years of data taking. Borexino provided the first real time measurement of the 7Be solar neutrino interaction rate and confirmed the absence of its day-night assymetry with 1.4% precision; gave the first direct evidence of the pep neutrino signal and the strongest constraint of the CNO solar neutrino flux to date. Borexino provided the measurement of the solar 8B neutrino rate with 3 MeV energy threshold.
In addition, Borexino sets the world best limits on hypothetical antineutrino fluxes from the Sun assuming undistorted 8B spectrum.
The review of all Borexino results within its solar neutrino program will be provided.

Auteur principal: Dr LUDHOVA, Livia (INFN Milano)

Orateur: Dr LUDHOVA, Livia (INFN Milano)

Classification de Session: Neutrinos

Classification de thématique: Experiment