

AVVISO DI SEMINARIO

La Prof. **Livia Ludhova**
(Forschungszentrum Jülich e RWTH Aachen, Germany)
terrà il seguente Seminario:

Observation of Neutrinos from the Sun and the Earth in Borexino

Aula Multimediale, giovedì 26 Ottobre 2017, ore 16.00

ABSTRACT

Borexino is a 300 ton liquid scintillator detector placed at the Laboratori Nazionali del Gran Sasso in Italy. Since the start of its data taking in May 2007, it has provided several measurements of solar neutrinos, important for the understanding of our star, as well as of the neutrino properties. In particular, Borexino has performed the first spectroscopic measurements of the pp, 7Be , and pep solar neutrinos, the measurement of the 8B neutrinos with the 3 MeV energy threshold, and has provided the best current limits on the CNO solar neutrinos and on the effective neutrino magnetic moment. The seminar will describe in detail the newly updated solar neutrino results, based on the Phase-2 data with significantly lowered radioactive background. Borexino has also observed geoneutrinos, antineutrinos emitted along the decay of long-lived radioactive elements inside the Earth. The seminar will also describe the status of art of this field and the latest Borexino geoneutrino results.