LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

Marco Pallavicini INFN Genova

SOX: Short Distance Neutrino Oscillations with Borexino

Borexino is a an excellent and well understood detector for both low energy sub-MeV neutrinos (as proven by the solar neutrino results) and anti-neutrinos. The European Community has recently approved a project for the construction of a neutrino or an anti-neutrino source which will allow to confirm or unambiguously reject the long standing neutrino anomalies suggested by the LSND experiments, by solar neutrino Gallium experiments, and by reactors experiments. The talk will outline the project and discuss the sensitivity of three different phases of the experiment.