LNGS SEMINAR SERIES

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Antineutrino analysis based on the FADC system data in Borexino

The Borexino DAQ, called FADC system, was created for spectrometry of different particles in the energy range from 1 to about 50 MeV. This energy region is the best for various antineutrino studies. The talk gives an overview author's activities, especially for geo-neutrino analysis. The algorithm of antineutrino search is considered in detail. The author pays special attention to energy calibration of the detector and spatial reconstruction of events. Also the SN simulation is presented. This activity is a part of GWNU analysis and the simulation is needed for updating the supernova early warning system (SNEWS).

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