Contribution ID : **16** Type : **Plenary/section talk**

Detector of the reactor AntiNeutrino based on Solid-state plastic Scintillator (DANSS). Status and first results.

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A detector of the reactor antineutrino based on a cubic meter of plastic scintillator is installed below 3.1 GW industrial reactor. The detector is placed on a movable platform which allows to change the distance from the reactor core center in the range 10.7-12.7 m. 2500 scintillator strips are readout individually by SiPMs and in groups of 50 by PMTs. In addition to the overburden by the reactor (˜50 m w.e.) the detector has multilayer passive shielding and active muon-veto.

Inverse beta-decay count rate of about 5000 events per day in the fiducial volume (78% of the detector) with bout 5% of cosmic background has been reached. DANSS is sensitive to sterile neutrino in the most interesting region of mixing parameter space.

The talk will cover the detector status and performance, as well as the first results.

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