

## **Antineutrino spectrometer DANSS - 5 years of running**

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Solid scintillator reactor antineutrino detector DANSS is placed on a movable platform below 3.1 GW industrial reactor of the Kalininskaya Nuclear Power Plant. The distance between the detector and the center of the reactor core is frequently changed in the range 10.9 - 12.9 m. The reactor materials provide overburden of about 50 m.w.e.

The one-cubic-meter sensitive volume of the detector is assembled from 2500 polystyrene scintillation strips and surrounded by a multilayer passive and active shielding. A dual readout by silicon photo multipliers (individually) and by convention PMTs (in groups of 50 strips) is used to achieve both high detector granularity and low noise trigger.

In the position closest to the reactor core up to 5000 inverse beta-decay events per day are collected with cosmic muons induced background below 2%. The talk covers 5 years of the detector operation, results of our search for light sterile neutrinos as well as plans for the detector upgrade.

### **Reference to paper (DOI or arXiv)**

### **Your gender (free text)**

**Primary author(s)** : ALEKSEEV, Igor (ITEP)

**Presenter(s)** : ALEKSEEV, Igor (ITEP)

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