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Recent results of the DANSS experiment

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We present new results of the DANSS experiment on the searches for sterile neutrinos. They are based on approximately 4 million of inverse beta decay events collected at 10.9, 11.9 and 12.9 meters from the reactor core of the 3.1 GW Kalinin Nuclear Power Plant in Russia. The neutrino spectrum dependence on the fuel composition is also presented. We have also measured the reactor power using the IBD event rate during 38 months with the statistical accuracy 1.5% in 2 days and with the relative systematic uncertainty of about 0.5%. Plans for the DANSS upgrade will be presented. This upgrade should allow DANSS to test the Neutrino-4 claim of observation of sterile neutrinos.

Working group

WG5

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