Contribution ID : **353** Type : **Oral talk**

Current status of the νGeN experiment aimed at studying properties of reactor antineutrinos.

Thursday, 29 October 2026 16:55 (15)

The νGeN experiment is aimed to study reactor antineutrinos properties at Kalinin Nuclear Power Plant in Udomlya. The experimental setup is located at about 11 meters under 3.1 GWth reactor which is leading to an antineutrino flux of (3.9-4.4)*10^{13} cm^{-2} s^{-1}. To detect antineutrinos the low-background 1.4 kg HPGe detector with energy threshold less than 300 eV is used. Such a threshold and high antineutrino flux gives a possibility to detect coherent elastic scattering of reactor antineutrinos on Ge nuclei in the fully coherence regime as well as search for the anomalous neutrino electromagnetic properties. The current status of the measurement and the planned upgrade of the setup will be presented.

Primary author(s) : PONOMAREV, Dmitrii (DLNP JINR)

Presenter(s) : PONOMAREV, Dmitrii (DLNP JINR)

Session Classification : Neutrino physics

Track Classification : Neutrino physics