

## Search for the rare processes within the $\nu$ GeN experiment at Kalinin Nuclear Power Plant

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The  $\nu$ GeN experiment is searching rare processes from antineutrino scattering at Kalinin Nuclear Power Plant (KNPP) at Udomlya, Russia. The experimental setup is installed under reactor unit #3 of KNPP on the moving platform, which allows changing the distance from the center of the 3,1 GW<sub>th</sub> core from 11,1 to 12,5 m. In this way, we obtain an enormous antineutrino flux of  $4,4 \cdot 10^{13}$   $\nu/\text{cm}^2/\text{s}$ . Construction materials of the reactor surrounding provide about 40 m w. e. overburden, which serves as a good shielding against cosmic radiation. In combination with a low ambient background, it gives us a unique opportunity to investigate antineutrino properties at the best experimental location in the world. To detect signals from the neutrino scattering, we use a high-purity, low-threshold germanium detector surrounded by passive and active shielding. A specially developed acquisition system allows suppressing events that correspond to noise. The current status of the experimental setup, data taking, and new results will be presented.