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Recent results of the RED-100 experiment

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RED-100 is a two phase emission detector with 130 kg of Xe as a target material designed to study coherent elastic neutrino-nucleus scattering (CEvNS). In 2021-2022, this detector was deployed 19 meters from the reactor core of Kalinin NPP (Udomlya, Russia) to search for CEvNS of reactor antineutrinos. Both reactor ON and reactor OFF data were acquired during the exposition. At the present moment the analysis of the collected data is underway. This talk describes the methods of analysis and presents the recent results of the experiment. The possibility to use argon as a target material in the detector is also discussed.

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