

## RED-100: Results and status

*Wednesday 27 August 2025 16:00 (20 minutes)*

The RED-100 is a two-phase noble gas emission detector built for observation of coherent elastic neutrino-nucleus scattering (CEvNS) in reactor antineutrino interactions with matter. The first data taking run with LXe target was carried out at the Kalinin nuclear power plant in 2022, and the final results are given and discussed. The RED-100 experiment is currently in preparation for Phase II with LAr. The laboratory tests have shown that the LAr is a much better working medium from the point of view of the background caused by the delayed electrons.

Challenges and technical solutions of detection low-energy signals in a ground-level conditions with the RED-100 detector are discussed.

### Collaboration you are representing

RED-100

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**Session Classification:** Neutrino Physics and Astrophysics

**Track Classification:** Neutrino Physics and Astrophysics