

The CONUS+ experiment

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With the CONUS reactor antineutrino experiment, the coherent elastic neutrino nucleus scattering (CEvNS) on germanium nuclei was studied at a nuclear power plant in Brokdorf, Germany. Very low energy thresholds of about 210 eV were achieved in four 1 kg point contact germanium detectors equipped with electric cryocooling. Strong constraints on the CEvNS rate which are less than a factor 2 above the signal predicted by the Standard Model were achieved. Last year, the CONUS setup was moved to a new site, a power plant in Leibstadt, Switzerland. There the CONUS+ experiment continues data taking with improved detectors at even lower energy thresholds and an optimised shield design. The setup was positioned at a distance of about 20 m from the center of the reactor core. The detector performances after the first few months of data taking will be described and future perspectives will be discussed based on the recently collected new data.

Alternate track

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Yes

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