

Recent results from the CONUS experiment

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The CONUS reactor antineutrino experiment studies coherent elastic neutrino nucleus scattering (CEvNS) on germanium nuclei. For several years, the experiment was collecting data at about 17 m distance from the 3.9 GWth reactor core of the 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. With the most recent data set, the constraints on the CEvNS rate could be significantly improved as compared to previous CONUS analyses. The CONUS setup was recently moved from Brokdorf to a power plant in Leibstadt, Switzerland, where the experiment will continue data taking with improved detectors and an optimised shield design.

Abstract title

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