

Final Conus results from data obtained at the Brokdorf reactor

venerdì 21 giugno 2024 17:30 (2 ore)

With the CONUS reactor antineutrino experiment, the coherent elastic neutrino nucleus scattering (CEvNS) on germanium nuclei was studied at 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 operated inside an optimized shield structure. The most recent results obtained during the final phase of data collection at the Brokdorf site are presented. The constraints on the CEvNS rate as compared to the previous CONUS analysis were improved by an order of magnitude and are now within a factor 2 of the signal rate predicted by the Standard Model.

Poster prize

No

Second affiliation

Gender

Male

Collaboration (if any)

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Classifica Sessioni: Poster session and reception 2

Classificazione della track: Reactor neutrinos