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Status and prospects of RECODE program with PPC Germanium detector

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The RECODE (Reactor neutrino COherent scanning Detection Experiment) uses two sets of high-purity germanium arrays to accurately measure the CEvNS process of reactor neutrinos. The high-purity germanium technology used comes from the PPC germanium detector technology developed by CDEX in dark matter experiments. The currently confirmed experimental site is located at Sanmen Nuclear Power Plant (NPP) in Zhejiang Province, China. In the RECODE project, two experimental sites with different distances to the core will be set up to carry out joint measurements. The far site is approximately 22 m away from the 3.4 GWth reactor core, and the near site is about 10 m away. This will endow RECODE with advantages such as a high neutrino flux (~5×10^13 ν/cm2/s) and the reduction of errors through joint measurements. In this talk, the status and prospects of RECODE will be described and discussed.

Collaboration you are representing

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