

## Plastic scintillator cosmic ray anti-coincidence system in RECODE experiment

*Wednesday 27 August 2025 18:00 (2 hours)*

Coherent Elastic Neutrino-Nucleus Scattering (CEvNS) is an important scientific frontier in the field of particle physics. We conducted CEvNS experiments around the RECORDE high-purity germanium reactor and developed a plastic scintillation counter anti-coincidence detector to suppress the background of cosmic rays. For large volume plastic scintillation detectors, research has optimized scintillation light collection technology based on moving wave fibers, achieving detection efficiency of over 99% for cosmic ray muons and anti-coincidence efficiency of over 98%.

### Collaboration you are representing

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