

HALO

Detection with lead

HALO is a dedicated supernova detector that uses lead blocks and helium detectors which record interactions created when neutrinos hit the lead and produce neutrons.

Part of SNEWS (the supernova early-warning system), HALO and other detectors around the world alert astronomers to supernovae so they can view them with telescopes.

The lead in HALO came from a cosmic ray experiment at Chalk River Laboratory.

Most supernova neutrino detectors are only sensitive to one flavour of neutrinos, but HALO is sensitive to all three (electron, muon, and tau).

