

The India based Neutrino Observatory, mini-ICAL and a shallow ICAL

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The genesis of the India based Neutrino Observatory project is described briefly. The flagship experiment is based on a 51,000 ton magnetised iron calorimeter (ICAL) which aims to determine the mass ordering of the 3 tiny neutrino masses through a measurement of atmospheric muon neutrinos and muon anti-neutrinos. An 85 ton 4mx4mx10 layer mini- ICAL detector with 10 glass RPCs has been built and is presently taking data at the rented premises of INO at Madurai. The delay in starting construction at the preferred site in the Theni district in Tamil Nadu has encouraged us to look at other options for locating the ICAL detector including the possibility of a shallow depth ICAL together with an efficient cosmic veto shield. The first steps towards examining this possibility are outlined.

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