

The proposed 50 kiloton magnetized Iron Calorimeter (ICAL) detector is designed to observe the atmospheric neutrinos and antineutrinos separately over a wide range of energies and baselines with high efficiency. It enables ICAL to place stringent constraints on the long-range flavour-diagonal neutral current interactions due to $(L_\mu - L_\tau)$ symmetry, combining the information on muon momenta and hadron energy on an event-by-event basis.