Title: Search for Heavy Neutrinos in  $\pi^+ \rightarrow \mu^+ \nu_\mu$  Decay

Speaker: Shintaro Ito, Okayama University, s-ito@okayama-u.ac.jp

Heavy neutrinos were searched for in pion decays  $\pi^+ \to \mu^+ \nu_\mu$  by examining the muon energy spectrum for extra peaks in addition to the expected peak for a massless neutrino. No evidence for heavy neutrinos was observed. Limits on the neutrino mixing matrix  $|U_{\mu i}|^2$  in the neutrino mass region of  $15.7-33.8~{\rm MeV/c^2}$ , improving on previous results by an order of magnitude, will be presented.