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## Constraining Sterile Neutrinos at IceCube

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Recent observation of a potential deficit in the anti-neutrino flux measurement at reactor experiments may suggest the possibility of sterile neutrino species with up to  $eV^2$  mass-square scale. The upward neutrinos at the IceCube/DeepCore observatory provide an ideal test of the sterile neutrinos, as the very long distance through the Earth and matter effect allow the sterile species significantly impact the  $\nu_\mu \rightarrow \nu_e$  transition possibility. We analyze the constraint on the sterile neutrinos with the IceCube's measurement of the angular distribution of muon neutrino events.

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