

Abstract Submitted
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Light Sterile Neutrino Search at Daya Bay JIAJIE LING, University of Illinois at Urbana-Champaign, DAYA BAY COLLABORATION — It has been well established through neutrino oscillation that neutrinos have masses and their flavors mix. In 2012, The Daya Bay Reactor Neutrino Experiment discovered that the last unknown neutrino mixing angle θ_{13} is non-zero. With more than one million reactor antineutrino interactions recorded since December 2011, besides the most precise measurement of $\sin^2 2\theta_{13}$, the Daya Bay experiment also has high sensitivity in sterile neutrino search due to its multiple baselines. In this talk, I will discuss the spectral analysis of the light sterile neutrino search in the largely unexplored region of $10^{-3} \text{ eV}^2 < |\Delta m^2| < 0.3 \text{ eV}^2$ at Daya Bay through the electron antineutrino disappearance channel.

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