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Atmospheric neutrino oscillations in JUNO

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The Jiangmen Underground Neutrino Observatory (JUNO) experiment is a multi-purpose experiment located in southern China. The detector is designed with 20-kton liquid scintillator and currently in its filling stage. The main physics goal of JUNO is to determine the neutrino mass ordering (NMO) via a precise measurement of the reactor neutrino oscillation spectrum. Atmospheric neutrino oscillation measurement in JUNO can potentially provide independent sensitivity to NMO and increase JUNO's total sensitivity in a joint analysis. This talk reports the recent progress made by JUNO towards this goal. The performances of atmospheric neutrinos' energy and direction reconstruction, event identification and background rejection with Monte Carlo simulation are discussed.

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