

JUNO reactor IBD selection with machine learning method

Jiangmen Underground Neutrino Observatory (JUNO) is a multi-purpose neutrino experiment located in southern China. The primary goal of JUNO is to determine the neutrino mass ordering and measure several neutrino oscillation parameters to sub-percent precision by measuring the oscillated reactor antineutrino spectrum at 52.5 km from eight nuclear reactors. Selection of the reactor IBD signal with high efficiency and accuracy is key to measuring the oscillated reactor antineutrino spectrum. I will present a box-cut method to separate the IBD signal from background. Besides, the results of separating IBD signals and accidentals by machine learning method will also be discussed.

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