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JUNO 海报

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The Jiangmen Underground Neutrino Observatory (JUNO) is a multipurpose underground neutrino detector designed primarily to determine the neutrino mass ordering. Its central detector consists of a 35.4-meter-diameter acrylic spherical vessel filled with 20 kilotons of liquid scintillator, surrounded by $\sim 17,600$ 20-inch and 25,600 3-inch photomultiplier tubes for high-precision detection. To achieve an energy resolution better than $3\%/\sqrt{E}$ at 1 MeV, a comprehensive calibration system has been developed. ROV (Remotely Operated under-LS Vehicle) serves as the three-dimensional calibration subsystem and its deployment complexity makes alternative calibration methods valuable. Cosmogenic neutron events provide a supplementary means for central detector calibration. This poster presents the following: (1) Neutron event selection criteria for waveforms storage strategy in online event classification. (2) Further neutron events offline selection for central detector uniformity calibration.

Collaboration you are representing

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