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Cosmogenic ${}^9\text{Li}$ and ${}^8\text{He}$ Backgrounds Measured at the Daya Bay Experiment HIN-LOK HENOCH WONG, University of California, Berkeley, DAYA BAY COLLABORATION — The unstable ${}^9\text{Li}$ and ${}^8\text{He}$ isotopes, produced through the interaction of cosmic-ray muons with carbon nuclei of the liquid scintillators in the antineutrino detectors, constitute one of the most important sources of background for the Daya Bay Reactor Neutrino Experiment. The experiment with the main goal of making a precise determination of the neutrino mixing angle θ_{13} is composed of eight identical detectors immersed in water pools underground that provide active shielding against muons. Such a configuration attenuates the muons to a low-enough level that allows for a direct measurement of this source of background to be made in-situ. This talk will give an overview of how the ${}^9\text{Li}$ and ${}^8\text{He}$ backgrounds are measured at Daya Bay.

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