Contribution ID: **11**   Type: **not specified**

Studies of ν_μ disappearance using 6 years of IceCube DeepCore data

Wednesday, 9 October 2019 11:15 (25 minutes)

The DeepCore sub-array of the IceCube Neutrino Observatory is optimized for the detection of neutrinos below 100 GeV and has been operational since 2010. Its data has been used in previous studies to measure the disappearance of atmospheric muon neutrinos due to neutrino oscillations. Since then, there have been many improvements to the calibration of the IceCube detector as well as the selection of atmospheric neutrino events. A new sample of events using six years of DeepCore data incorporating these improvements has been developed for use in future studies. This talk outlines the features of the new event selection and the projected sensitivity to muon neutrino disappearance.

Summary

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