

# DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 302

Type: **Parallel talk**

## Latest Neutrino Oscillation Results from the IceCube Experiment

*Tuesday 28 March 2023 15:40 (20 minutes)*

The IceCube Neutrino Observatory is a Cherenkov detector located at the South Pole, instrumented in a cubic kilometer of ice. The DeepCore subdetector, at the lower center of the IceCube array, has a denser configuration and has allowed us to see GeV-scale neutrinos, which improves the sensitivity to atmospheric neutrino oscillations. Precise reconstruction is critical to neutrino oscillation parameter measurements. This study employs convolutional neural networks (CNNs) to reconstruct neutrino interactions in the DeepCore detector. This talk discusses the result of the atmospheric muon neutrino disappearance analysis using the CNN-reconstructed neutrino sample and compares it to the existing worldwide measurements.

### Submitted on behalf of a Collaboration?

Yes

### Participate in poster competition?

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**Presenter:** MAYHEW, Finn

**Session Classification:** WG6

**Track Classification:** WG6: Future Experiments