Contribution ID: 7 Type: Oral

## Latest Results of NOvA and T2K

Wednesday, May 11, 2022 2:00 PM (20 minutes)

Long-baseline neutrino oscillation experiments present some of the most compelling paths towards beyond-the-standard-model physics. They do this by utilising intense, well controlled muon neutrino beams along with near detectors to constrain neutrino flux, cross sections, and backgrounds whilst measuring electron neutrino appearance and muon neutrino disappearance. By observing these neutrino oscillations along with their antineutrino counterparts, experiments are able to probe outstanding questions in neutrino physics including the neutrino mass ordering, leptonic CP violation, and measuring the atmospheric neutrino mass splitting and the large mixing angle. Resolving these questions could lead to an understanding of the nature of neutrino mass and explaining the observed excess of matter over antimatter in our Universe. In this talk, we will review recent results from two World-leading long-baseline neutrino experiments, NOvA and T2K.

Primary author: WARBURTON, Karl (Iowa State University)

**Presenter:** WARBURTON, Karl (Iowa State University)

Session Classification: Neutrino Oscillations - Parallel

Track Classification: Neutrino Oscillations