Contribution ID: **28** Type: **Plenary Presentation**

New Physics in Neutrino Oscillations

Wednesday, 6 December 2023 09:55 (25 minutes)

The discovery that neutrinos oscillate was one of the first indications of physics beyond the Standard Model. That is, the addition of neutrino masses to the Standard Model requires, at minimum, three new sterile states. Furthermore, models seeking to explain the smallness of neutrino masses lead to a direct connection between observed neutrino masses and physics at very high mass scales. Therefore, neutrino oscillations are an excellent target for exploring new physics.

Upcoming oscillation experiments are expected to achieve levels of precision which will allow for searches for new physics through their imprint on observed oscillation patterns. In this talk, I will give a survey of new physics possibilities and the prospects of upcoming experiments to shed light on them.

Name of collaboration or list of co-authors

None

Primary author: AURISANO, Adam Jude (University of Cincinnati)

Presenter: AURISANO, Adam Jude (University of Cincinnati)

Session Classification: Wednesday morning