Contribution ID: **307** Type: **Oral**

Astrophysics with the NOvA neutrino experiment

Monday 7 August 2017 15:15 (15 minutes)

NOvA is a long-baseline neutrino oscillation experiment with the primary goals of discovering CP violation in the neutrino sector, determining the neutrino mass hierarchy and constraining the mixing angle θ_{23}. NOvA also has a rich program of cosmic ray and astrophysical measurements. We will set competitive limits on the flux of magnetic monopoles as well as for neutrinos resulting from dark matter annihilation in the Sun. Both the NOvA near and far detectors are capable supernova observatories. The NOvA near detector has confirmed a puzzling reversal, first seen by MINOS, of the usual seasonal trend of cosmic rays underground in the case of multiple muons. Several other astrophysical topics will also be discussed.

Author: Dr STRAIT, Matthew (University of Minnesota)

Presenter: Dr STRAIT, Matthew (University of Minnesota)

Session Classification: Neutrinos

Track Classification: Neutrinos (astrophysical, atmospheric)