



LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP)

# Joint Experimental and Theory Seminar in Particle Physics and Cosmology:

## Investigating Neutrino Properties with the NOvA Experiment



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Neutrinos are perhaps the least understood members of the Standard Model of Particle Physics, but that is rapidly changing. Precision measurements from long-baseline detectors are revealing details about their interactions, masses, and mixing properties. The NOvA experiment features a 14 kiloton liquid scintillator detector to study neutrinos after an 800 kilometer journey from Fermilab to northern Minnesota. NOvA is poised to resolve the uncertainty in the neutrino mass hierarchy and provide new insights into neutrino mixing parameters. This seminar will present an overview of neutrino oscillation phenomena and discuss recent results from the NOvA collaboration.

**Friday, April 20, 2018**

**1:00pm**

**401 Physical Sciences Bldg.**