



Contribution ID: 226

Type: **Talk**

## Overview of the NOvA Experiment and the Latest Results

*Monday 5 September 2022 16:30 (20 minutes)*

NOvA is an accelerator-based long-baseline neutrino experiment designed to study neutrino oscillations. In particular, NOvA aims to understand the dominance of matter over antimatter in the universe, to resolve the ordering of neutrino masses, and to resolve the octant of neutrino mixing angle. For its physics goals NOvA uses two functionally-identical detectors. The Near Detector (ND) is situated at Fermilab, 1 km from the neutrino target and the Far Detector (FD) is located at Ash River, MN, a distance of 810 km from the neutrino source. The ND due to its close proximity to the neutrino source receives a high statistics neutrino flux which gives a unique opportunity for high precision neutrino cross-section measurements and is used as a control for the oscillation analyses. The FD is used to analyze the appearance and disappearance of the neutrinos arriving from the Fermilab. In this talk, I will give an overview of the NOvA experiment and the status of latest physics results.

### Is this abstract from experiment?

Yes

### Name of experiment and experimental site

Experiment: NOvA, Site: Fermilab, USA

### Is the speaker for that presentation defined?

Yes

### Details

Name: Dr. Prabhjot Singh

Institution: Queen Mary University of London

Country: The United Kingdom

Webpage: <https://www.qmul.ac.uk/spcs/physics-and-astronomy/>

### Internet talk

Yes

**Author:** Dr SINGH, Prabhjot (University of London (GB))

**Presenter:** SINGH, Prabhjot

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