APR16-2016-000216

Abstract for an Invited Paper for the APR16 Meeting of the American Physical Society

Results and Status of the T2K and NOvA long-baseline neutrino experiments.

MATHEW MUETHER, Wichita State University

The discovery of neutrino oscillations and the resulting implication that neutrinos have mass, recently awarded the Nobel Prize in Physics, has bolstered a world-wide effort to exploit this effect as a handle on the properties of neutrinos. In the decades since the initial discovery of neutrino oscillations, great strides have been made in understanding the nature of these elusive particles, yet important and fundamental questions remain open, such as: How are the neutrino masses ordered? And Do neutrinos and antineutrinos oscillate differently? The current generation of accelerator based long-baseline neutrino oscillation experiments, T2K in Japan and NOvA in the United States, are actively pursuing the answers to these questions. In this talk, I will review the recent results and current status of the T2K and NOvA long-baseline neutrino experiments.