

Linda Cremonesi – Colloquium talk September 09, 2021
Mary University – London

Title: The secrets of neutrino interactions in the NOvA experiment

Abstract: NOvA is long-baseline neutrino experiment aimed at precisely measuring neutrino oscillation parameters linked to the matter-antimatter asymmetry in the universe. To measure neutrino oscillations, we need to learn and understand how neutrinos interact. The high statistics neutrino samples collected at the NOvA near detector are used to make precise measurements of neutrino interaction cross sections. This talk will present an overview of the neutrino interaction cross-section programme of the NOvA experiment, and highlight our latest measurements of the muon neutrino charged-current inclusive cross section, and the first ever double differential electron neutrino charged-current inclusive cross section.