

Physics Division Seminar

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Event Generators in Neutrino Oscillation and Cross Section Experiments

Host: Alessandro Lovato

Monday, March 25, 2019 – 203, R150, 3:30 PM

All accelerator based neutrino experiments depend heavily on event generator Monte Carlo programs. These programs are closely matched to experimental needs, but contain an interesting mix of nuclear and high energy physics theory. This talk will discuss the needs of experiments at Fermilab where GENIE is the main software package. Applications of event generator usage by experiments show potentially new directions. Main part of the talk focuses on event generator strategies, accomplishments and new directions. GENIE provides most of the examples.