Contribution ID: **16** Type: **not specified**

Beyond the Standard Model Physics at DUNE

Monday, 3 June 2024 09:40 (30 minutes)

Precision measurements of neutrino properties necessary for modifying the Standard Model requires a unique combination of the high-intensity LBNF proton beams with a highly-capable precision DUNE near detector, and massive LArTPC far detector modules at a 1300 km baseline. This capability enables a variety of opportunities for Beyond the Standard Modem (BSM) physics, either novel or with unprecedented sensitivity which were impossible to conceive in traditional neutrino experiment. The near detector system is critical in controlling systematic uncertainties. The near detector plays an essential role in taking full advantage of the LBNF beam in most of the BSM physics topics. In this talk, I will discuss BSM physics topics DUNE can make contributions and will briefly summarize how DUNE can make leading contributions in this arena, taking advantage of the capable near detector.

Presenter: YU, Jaehoon (The University of Texas at Arlington)

Session Classification: Plenary 1