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Particle Theory Seminar of LPT Orsay

Jeudi 15 Fevrier 2018, 16 :00
LPT, 114
Domaines : hep-ph

Titre : *Physics beyond oscillation at DUNE*

Orateur : **Zahra Tabrizi (Sao Paulo University)**

Résumé : *The DUNE near detector would offer not only the requisite systematic precision for oscillation studies, but also a generational advance in the precision measurements and unique searches that a neutrino beam can provide. We use neutrino trident events as a way to probe new physics at DUNE. We also use elastic neutrino scattering on electrons as a way to extract the uncertainty of the weak mixing angle. Moreover, we use the trident production, elastic neutrino scattering on electrons and neutrino scattering on nuclei as a way to constrain the operators in the Standard Model Effective Field Theory (SMEFT).*