C. -P. Yuan – HEP Seminar – September 19, 2023 MSU

Title: Comments on Higgs Boson Physics at the LHC

Abstract:

I will give a few comments on Higgs boson physics at the LHC. I will explain why the SMEFT (Standard Model Effective Field Theory) program at the LHC cannot cover all possible shapes of Higgs potential predicted by various New Physics models. I will also introduce a few novel experimental observables to further improve the determination of the Higgs boson properties. Part of this talk is based on the summary talk I gave a the the 10th international conference on Multi-Boson Interactions (MBI) held at UC San Diego, Aug 29 - Sep 1, 2023. https://indico.cern.ch/event/1263917/timetable/#all.detailed