



High Energy Physics Lunch Seminar

Yuan-Sen Ting

Institute for Advanced Study/Princeton University

“Into the starlight: Learning the Milky Way”

Host: Nesar Ramachandra

November 12 2019 – 12:00 p.m.-1:00p.m. Building 362/F-108

Abstract:

Understanding physical processes responsible for the formation and evolution of galaxies like the Milky Way is a fundamental but unsolved problem in astrophysics. Most stars are long-lived, using the stars as “fossil records” (what is known as Galactic archaeology) can offer unparalleled insight into the assembly of galaxies. The landscape of Galactic archaeology is rapidly changing thanks to on-going large-scale surveys (astrometry, photometry, spectroscopy, and asteroseismology) which provide a few orders of magnitude more stars than before. I will discuss various “phenomenological” opportunities enabled by large surveys. I will also discuss how we could describe substructures in the Milky Way through the lens of deep learning.

HEP Lunch seminar info:

Please use the doodle poll to sign-up for lunch at

<https://doodle.com/poll/z5wugf2z85x5sub4>

Chicken Sandwich \$8, Sub Sandwich \$9, Salad \$7, Slice of Pizza- \$5 (all include coffee). Coffee 25¢. Pop or Water 75¢.

The HEP Lunch Seminar Schedule can be viewed at:

<https://indico.fnal.gov/event/22358/>