HIGH ENERGY PHYSICS

THE UNIVERSITY OF CHICAGO ENRICO FERMI INSTITUTE

The Monday HEP Seminar

PRESENTS:

"Just the Beginning: the Post-Higgs Discovery LHC"



Lauren Tompkins
The University of Chicago

The first run of the Large Hadron Collider was an unequivocal success. Its marquee result, the Higgs Boson discovery, revealed a key element of the Standard Model of fundamental particle interactions. However, the particle physics community expects that the era of discovery for the LHC is just beginning. In this talk I will discuss the post-Higgs discovery landscape, explain why LHC physicists are so excited about the physics prospects of a 14 TeV LHC, and present a detector upgrade, the Atlas Fast Tracker, which will improve the ATLAS experiment's ability to record collisions which might contain new physics. In particular, I will focus on the role of heavy fermions which are critical to the understanding of the Higgs Boson and also play a prominent role in many theories of physics beyond the Standard Model.

Monday, June 9, 2014 4:15PM in KPTC 206

If any assistance is needed, call Aspasia Sotir-Plutis in advance at (773) 702-8113