

Nick Hadley – Colloquium - April 25, 2019

Title: "Higgs Boson Studies and Dark Matter Searches with the CMS Experiment at the Large Hadron Collider"

Abstract: The last piece in the Standard Model of elementary particles, the Higgs Boson, was discovered in 2012.

It has a mass of about 125 times the mass of a proton and remains the only known scalar elementary particle.

I will discuss the latest results on studies of the Higgs Boson done with the CMS experiment at the Large Hadron Collider at CERN. In addition, I will discuss searches for Dark Matter, which appears to be the largest component of the mass of the Universe, but has never been detected on earth.