

**Tuesday, December 8, 11:30 am**

**Speaker:** Kétévi Assamagan

**Institution:** Brookhaven National Laboratory

**Title:** Searches for Dark Sector states in Exotic Higgs Boson decays at the LHC

**Abstract:** Hidden or dark sector states appear in many extensions to the Standard Model, to provide particle candidates for dark matter, explain the  $g-2$  discrepancy or astrophysical observations such as the positron excess in the cosmic radiation flux. A hidden or dark sector may be introduced with an additional  $U(1)_d$  dark gauge symmetry. The discovery of the Higgs boson during Run-1 of the Large Hadron Collider opens a new and rich experimental program based on the Higgs Portal. In this talk, I will discuss the searches for dark sector states in the decays of the Higgs Boson—exotic Higgs decays.