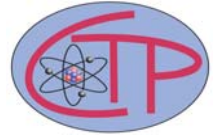




*NEW YORK CITY COLLEGE OF TECHNOLOGY*  
**Physics Department**  
**Center for Theoretical Physics**



# **What the Experimentalists at LHC Want from the Theorists**

***Presented by:***

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**Thursday, November 29 at 11:50 AM**

*Note that we will begin 10 minutes earlier than usual*

**Namm, Room 823**

## **Abstract**

The Large Hadron Collider (LHC) at CERN has been running for two years and has already delivered a huge amount of data, leading to increasingly interesting results. This process culminated with the announcement of the discovery of a new particle fulfilling all the criteria to be the Higgs boson. This very important result for the whole physics community could confirm the existence of the last and long-time missing ingredient of the Standard Model of particle physics. This discovery was possible thanks to years of intense work of the experimental particle physics community, but also thanks to precise theoretical predictions, which enabled the accurate description of signal and background processes. In this talk, I will briefly review some of the important theoretical aspects which were developed and led to the discovery.