



PHYSICS AND ASTRONOMY COLLOQUIUM

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“ATLAS — Past, Present and Future”

Abstract

Particle physics has a standard model (SM) that enables a vast array of physical phenomenon to be calculated to sufficient precision that these predictions can be tested against experiment. Presented in the colloquium is a personal and somewhat quirky selection of the particle physics that is explored at the ATLAS experiment at the Large Hadron Collider. New physics would be required if an aspect of the SM was refuted by observation. This includes searches for new phenomenon not predicted by the SM. The colloquium will look at the nature of the experimental situation ATLAS operates in and indicate some of the positive aspects and challenges. The ATLAS experiment is working on an upgrade and that will be motivated and briefly described.

Wednesday March 29, 2017

3:00 p.m.

Elliott Building

Room 167