



UNIVERSITY OF MIAMI
COLLEGE of
ARTS & SCIENCES

Miami Physics Conference 2024

Date: Dec 12-19, 2024
Location: Lago Mar Resort
Affiliation: Oklahoma State University

Zackary Alegria

Recent Searches for New Phenomena with the ATLAS Detector

Abstract

Many theories beyond the Standard Model (SM) have been proposed to address several of the SM shortcomings, such as explaining why the Higgs boson is so light, the origin of neutrino masses, or the observed pattern of masses and mixing angles in the quark and lepton sectors. Many of these beyond-the-SM extensions predict new particles or interactions directly accessible at the LHC. This talk will present some highlights on recent searches by the ATLAS detector at the LHC.