Contribution ID: **161** Type: **oral presentation**

Searches for new physics in high-mass ditau events at ATLAS

Thursday, 15 August 2013 08:30 (20 minutes)

"The LHC has brought a new level of sensitivity to TeV-scale new physics. Tau leptons can have preferred couplings to possible new physics, including Z' bosons motivated by grand unified theories. Hadronic tau decays are one of the most difficult final states to identify at hadron colliders like the LHC. ATLAS has multivariate techniques for identifying hadronic tau decays using Boosted Decision Trees and sophisticated calibrations. Tau final states give complex multijet and electroweak background compositions that require data-driven techniques. Results will be presented from searches for Z' bosons in high-mass ditau events at ATLAS."

APS member ID

61150591

Primary author: REECE, Ryan (University of Pennsylvania)

Presenter: REECE, Ryan (University of Pennsylvania)

Session Classification: Physics Beyond the Standard Model

Track Classification: Physics Beyond the Standard Model