

MEETING OF THE AMERICAN PHYSICAL SOCIETY DIVISION OF PARTICLES AND FIELDS

Contribution ID: 202

Type: Poster

Search for vector-like quarks in fully hadronic final states with the ATLAS detector

Monday, 31 July 2017 18:22 (1 minute)

This poster is presenting a search for pair produced vector-like quarks decaying in to a fully hadronic final state using 36.1 fb–1 of pp collisions with a center of mass energy of 13 TeV collected by the ATLAS experiment. We consider the decays of pair produced T and B vector-like quarks in to third generation standard model quarks with Higgs boson and gauge bosons W and Z. The analysis uses the variable radius re-clustering algorithm to reconstruct the large-radius jets and a multi-class deep neural network is used to tag the jets as hadronically-decaying top quarks, Higgs bosons, W bosons or Z bosons.

Primary author: Mr MADUGODA RALALAGE DON, Madhuranga Thilakasiri (Oklahoma State University)

Presenter: Mr MADUGODA RALALAGE DON, Madhuranga Thilakasiri (Oklahoma State University) **Session Classification:** Poster Session and Reception

Track Classification: Beyond Standard Model