

Abstract Submitted
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Study of Vector-Like Quarks Using Dilepton and Trilepton + b-Jets Events in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector SARAH JONES, Univ of Arizona, ATLAS COLLABORATION — A search for physics beyond the Standard Model is presented using dilepton and trilepton events with at least one b jet and large missing transverse energy. Some models looking for beyond the Standard Model physics predict Vector-Like Quarks (VLQ), which can potentially produce these types of events. VLQ are theorized to be non-supersymmetric massive quarks that can couple to top and bottom quarks. The analysis is presented with emphasis on the VLQ search, even though multiple signals are studied in this analysis.

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