

Abstract Submitted  
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**Search for new resonances in the  $ZV \rightarrow \nu\nu qq$  final state in  $pp$  collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector** YICHENG GUO, Univ of Michigan - Ann Arbor, ATLAS COLLABORATION — I will report a search for heavy resonances beyond the standard model decaying into a  $ZV$  ( $V = Z, W$ ) diboson pair with a final state of dijet (decay from  $V$ ) plus missing transverse energy ( $E_T^{miss}$ ) due to  $Z \rightarrow \nu\nu$ . Data used in this analysis is from proton-proton collisions at a centre-of-mass energy of  $\sqrt{s} = 13$  TeV from the Large Hadron Collider, and recorded by the ATLAS detector. The mass range in the search is from 500 to 5000 GeV. In this mass range the hadronically-decaying vector boson is reconstructed using boosted-jet techniques. No resonance is observed in data. In the absence of a deviation from the Standard Model expectation, upper bounds on the new resonance production cross sections times their decay branching ratios to  $ZV$  pairs are derived within the context of Standard Model extensions with an extended Higgs sector, a heavy vector triplet and warped extra dimensions.

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