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Type: **Experiment**

Search for resonant $WZ \rightarrow 3\ell \nu$ production in $\sqrt{s} = 8$ TeV pp collisions with 13 fb⁻¹ at ATLAS

Although recent LHC results are compatible with an electroweak symmetry breaking through the Standard Model Higgs mechanism, the inherent implausible fine-tuning it requires suggests new phenomena must exist at or beyond energies of $O(1)$ TeV. In this perspective, diboson resonances would be key signatures in understanding the structures beyond the Standard Model. With 13 fb⁻¹ of ATLAS recorded data using 8 TeV pp collisions at the LHC, a search for fully leptonic WZ resonances are presented. Two important benchmark models were used to interpret the results: Extended Gauge and Low Scale Technicolor models. No localized deviation from expectation was observed in the reconstructed WZ invariant mass system, hence upper limits on the production cross section times branching ratio were computed.

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