

Abstract Submitted  
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**Measurement of the ZZ production cross section and limits on anomalous neutral triple gauge couplings in 20.7 fb-1 of proton-proton collisions at  $\sqrt{s} = 8$  TeV with the ATLAS detector**<sup>1</sup> LAILIN XU, The University of Michigan, ATLAS COLLABORATION — The measurement of the Standard Model ZZ diboson production(double resonance) cross section with proton-proton interactions at  $\sqrt{s} = 8$  TeV with the ATLAS experiment will be reported. The measurement is based on events with one Z boson decaying into di-electron or di-muon, and the other either decaying similarly (4 charged lepton final state), or to neutrino pair (two charged lepton plus two neutrino final state). Differential cross sections and kinematic distributions will be presented. Limits on anomalous triple-gauge boson couplings are derived from data compared to theory with much higher sensitivity compared to those from any previous experiments.

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