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Search for $WWW \to l\nu l\nu l\nu$ production in the ATLAS detector at $\sqrt{s} = 8$ TeV ALEX LONG, Boston Univ, ATLAS COLLABORATION — This talk presents the status of a search for WWW production in the fully leptonic final state using proton-proton collision data at $\sqrt{s} = 8$ TeV recorded by the ATLAS experiment at the CERN Large Hadron Collider. It represents one of the first searches to probe the Standard Model WWWW coupling directly at a collider. Many new models of beyond the Standard Model physics give rise to anomalous quartic qauge couplings to which this type of search could be sensitive. The fully leptonic channel provides the cleanest channel to look for such a process and is thus a promising channel for the first measurement of the WWW production cross section. This includes WH associated Higgs boson production. An effective field theory approach is used for the interpretation of anomalous quartic gauge couplings.

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