

# Search for heavy triboson production in leptonic final states with full Run II data at CMS

Wednesday 29 July 2020 15:55 (25 minutes)

We present the search for heavy triboson production, specifically targeting the production of WWW, WWZ, WZZ and ZZZ processes in multileptonic final states with  $137 \text{ fb}^{-1}$  of data collected by the CMS detector during Run II of the LHC at  $\sqrt{s} = 13 \text{ TeV}$ . An event selection consisting of identically charged dileptons and trileptons is constructed to primarily study the WWW process, while the WWZ, WZZ and ZZZ processes are explored in four, five and six lepton final states. The analysis utilizes both traditional cut-based and multivariate techniques using boosted decision trees.

## I read the instructions

## Secondary track (number)

**Author:** CHANG, Philip (UC San Diego)

**Presenter:** CHANG, Philip (UC San Diego)

**Session Classification:** Top Quark and Electroweak Physics

**Track Classification:** 04. Top Quark and Electroweak Physics